



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

ANNUAL REPORT

OF THE

SECRETARY OF STATE,

TO THE

GOVERNOR OF THE STATE OF OHIO,

FOR THE YEAR 1879.

Received, Feb. 2nd 1880

1879/71

*RECEIVED
FEB 2 1880*

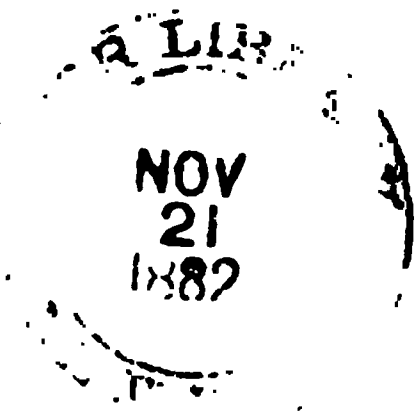
COLUMBUS:

NEVINS & MYERS, STATE PRINTERS.

1880.

SA 8

501



4762.

NOV 21 1882

OHIO PIONEER HISTORY.

**CRESAP AND LOGAN, CRAWFORD'S CAMPAIGN, AND A BRIEF
BIOGRAPHICAL SKETCH OF COL. WILLIAM CRAWFORD.**

By ISAAC SMUCKER.

desire to vindicate the truth of history, to defend the reputation of a meritorious revolutionary officer against the aspersions most unjustly heaped upon him, and to disprove the false charges that have induced so many to attach infamy to the name and memory of Captain Michael Cresap, will, I trust, be deemed by all fair-minded persons, a sufficient reason and full justification for occupying so much space.

blistered body amidst the blazing flames of the stake, there was experienced such heart-rending anguish of soul as can not be expressed in words. A gloom was spread in every countenance. Sympathy and commiseration went out from every heart. All keenly felt the tortures inflicted upon the heroic patriot-soldier. Every one sorely lamented, with the Father of his Country, the melancholy, sad, sorrowful ending of the noble life of the brave companion in arms and friend of Washington. All hearts were moved by the tenderest sympathy when the announcement was made that there was such a sorrowful termination to the valuable life of the BRAVE PIONEER OF THE YOUGHIOGHENY!

OHIO TERRITORIAL LAWS
FOR THE
PUNISHMENT OF CRIME.

By CHARLES B. FLOOD.

O H I O .

ITS ADMISSION INTO THE UNION.

BY I. W. ANDREWS,

President of Marietta College.

OFFICIAL
ROSTER OF OHIO,
FOR 1879-80.

[AS REPORTED BY EACH DEPARTMENT.]

**INCLUDING THE HEADS OF DEPARTMENTS AND APPOINTED OFFICERS,
JUDGES OF THE COURTS, AND TIMES OF HOLDING COURTS, TRUSTEES
AND OFFICERS OF STATE EDUCATIONAL, REFORMATORY, AND
BENEVOLENT INSTITUTIONS, MEMBERS OF THE GEN-
ERAL ASSEMBLY OF OHIO, APPORTIONMENT
OF GENERAL ASSEMBLY, COUNTY
OFFICERS, Etc., Etc., Etc.**

OHIO STATE BOARD OF AGRICULTURE.

Name.	Office.	Residence.	Term of office.	Term expires.
B. W. Carlisle	President	Hooker's Station....	1 year..	January, 1880
L. B. Wing.....	Treasurer.....	Newark	"	January, 1880
Jas. W. Fleming.....	Acting Secretary.	Columbus	"	January, 1880

DEPARTMENT OF MINES.

Name.	Office.	Residence.	Term of office.	Term expires.
David Owens.....	State Inspector of Mines	Sodom, Trumbull Co.	4 years.	Nov. 14, 1883

BUREAU OF LABOR STATISTICS.

Name.	Office.	Residence.	Term of office.	Term expires.
H. J. Walls.....	Commissoner	Columbus	2 years.	Jan. 1, 1881

COLUMBUS ASYLUM FOR THE INSANE.

BOARD OF TRUSTEES.

Name.	Residence.
Joseph P. Smith, President	Circleville.
John Greenleaf, Secretary	Columbus.
Benjamin Myers	Ashland.
George W. Morgan	Mt. Vernon.
C. P. L. Butler	Columbus.

OFFICERS.

Name.	Residence.
L. Firestone, Superintendent.	Columbus.
Henry A. Tobey, Assistant	Columbus.
Charles W. King, "	Columbus.
Thomas R. Sparrow, "	Columbus.
George P. Follett, "	Columbus.
Eli J. Blount, Steward	Columbus.
Mrs. S. Firestone, Matron	Columbus.
Samuel I. McCoy, Book and Store-keeper	Columbus.

CLEVELAND ASYLUM FOR THE INSANE.

BOARD OF TRUSTEES.

Name.	Residence.
A. McGregor.....	Canton.
James Barnett.....	Cleveland.
A. P. Winalow.....	Cleveland.
D. L. Wadsworth.....	Wellington.
John F. Perry.....	Cuyahoga Falls.

OFFICERS.

Name.	Office.
Jamin Strong, M.D.....	Superintendent.
John S. Marshall, M.D.....	First Asst. Physician.
James D. Maxwell, M.D.....	Second “
F. D. Burton, M.D.....	Third “
C. W. Diehl.....	Steward.
Nettie L. Strong.....	Matron.

LONGVIEW ASYLUM FOR THE INSANE

BOARD OF TRUSTEES.

Name.	Residence.
H. D. Peck.....	Cincinnati.
Rev. J. F. Chalfant.....	Springdale.
A. J. Mullane.....	Cincinnati.
B. Roth.....	"
C. S. Muscroft.....	"

OFFICERS.

Name.	Residence.
C. A. Miller, M.D., Superintendent.....	Longview Asylum.
Dr. F. F. Hellman, Asst. Physician.....	" "
Dr. J. M. Ratliff, ".....	" "
W. H. Rowe, Steward.....	" "

OHIO SOLDIERS' AND SAILORS' ORPHANS' HOME.

BOARD OF TRUSTEES.

Name.	Residence.
B. Burns, President	Mansfield.
A. N. Stork, Secretary	Xenia.
A. M. Stimson	Washington C. H.
John Kirkpatrick	Cambridge.
B. C. Blackburn	Roscoe.

OFFICERS.

Name.	Residence.
N. R. Wyman, Superintendent	Sidney.
D. M. Brelsford, Clerk	Columbus.
C. B. Jones, Physician	Xenia.

TOLEDO HOUSE OF REFUGE AND CORRECTION.*

BOARD OF TRUSTEES.

Name.	Residence.
Geo. L. Johnson, President	Toledo.
Fred. B. Shoemaker	"
John M. Hauser.....	"
C. A. Kirkley	"
Walter Pickens	"

OFFICERS.

Name.	Residence.
Chas Douglass, Superintendent.....	Toledo.
Mrs. A. E. Douglass, Matron.....	"
W. K. Mandeville, Deputy Superintendent.....	"
Seth W. Beckwith, teacher	"
Miss A. M. Cogswell, "	"

* Not under State control.

OHIO REFORM SCHOOL.

BOARD OF TRUSTEES.

Name.	Residence.
John M. Pugh	Columbus.
Rev. B. W. Chidlaw	Cleves.
Chas. Mams	Belle Center.
Jacob Cherryholmes	Millersburg.
Henry J. Reinmund	Lancaster.

OFFICERS.
(Not reported.)

J U D I C I A R Y .

NINTH DISTRICT.

District Court.

Trumbull, April 12; Portage, April 5; Lake, March 31; Geauga, April 7; Ashtabula, March 22; Mahoning, March 22; Columbiana, April 21; Carroll, April 28; Stark, April 12.

Common Pleas.

Carroll, January 19, May 10, November 8.
 Stark, January 19, May 10, October 18.
 Columbiana, February 9, May 24, November 22.
 Mahoning, January 12, May 3, September 6.
 Trumbull, February 9, May 24, October 18.
 Portage, January 12, May 3, September 6.
 Lake, February 9, May 31, November 15.
 Geauga, January 12, May 3, October 18.
 Ashtabula, January 12, May 3, October 18.

TENTH DISTRICT.

District Court.

Crawford, July 9; Hardin, March 30; Hancock, April 7; Logan, March 19; Marion, March 29; Union, March 16; Seneca, April 13; Wood, April 20; Wyandot, April 2.

Common Pleas.

Crawford, January 5, April 26, September 6.
 Hardin, February 23, May 3, October 4.
 Hancock, January 5, June 8, September 6.
 Logan, February 17, May 25, October 19.
 Marion, February 17, June 8, November 2.
 Seneca, February 2, May 31, September 6.
 Union, January 5, May 3, September 13.
 Wood, February 16, May 3, October 4.
 Wyandot, February 2, May 18, October 13.

OFFICE OF THE SECRETARY OF STATE,
 COLUMBUS, O., November 10, 1879.

I hereby certify that the above is correctly copied from the official lists returned to this office.

[SEAL.]

MILTON BARNES, *Secretary of State.*

13th	Strong, Luther M.	Hardin	Kenton	Attorney-at-Law.
17th and 28th	Sullivan, J. J.	Holmes	Millerburg	Farmer.
4th	Tyler, George F.	Brown	Russellville	Manufacturer.
10th	Van Cleaf, A. R.	Pickaway	Circleville	Editor.
18th	Wilkins, Beriah	Tuscarawas	Uricksville	Banker.
33d	Wilkins, John A.	Fulton	Delta	Physician.

APPORTIONMENT—SENATE.

POPULATION OF STATE, 2,655,118; FULL RATIO, 76,146; THREE-FOURTHS RATIO, 5~~7~~, 1.

Districts.	Counties.	Population.	Population of district.	Fraction over full ratio.	Fraction multiplied by five.	Number added for fraction.	Terms.					Total.
							1st.	2d.	3d.	4th.	5th.	
16	Delaware	25,175	61,297	1	1	1	1	1	5
	Licking	36,122										
17	Knox	26,333										
	Morrow	18,523	92,176	22,030	110,150	1	1	1	1	1	2	6
and	Total 17th dis	44,946										
28	Wayne	35,022										
	Holmes	18,178	57,440	1	1	1	1	1	5
	Total 23th dis.	53,260										
18	Coshocton	23,600										
	Tuscarawas ..	33,840	59,552	1	1	1	1	1	5
19	Guernsey	23,798										
	Monroe	25,780										
	Noble (part) ..	9,974	58,397	1	1	1	1	1	5
20	Belmont	39,715										
	Harrison	18,682										
21	Carroll	14,491	66,999	1	1	1	1	1	5
	Stark	52,508										
22	Jefferson	29,188										
	Columbiana ..	38,299	67,487	1	1	1	1	1	5
23	Trumbull ...	38,659										
	Mahoning ...	31,001										
24	Ashtabula ...	32,518	69,660	1	1	1	1	1	5
	Lake	15,935										
	Geauga	14,200										
25	Cuyahoga ...	132,012	132,012	55,866	279,330	3	2	2	2	1	1	8
26	Portage	24,577										
	Summit	34,674										
27	Medina	20,092	59,251	1	1	1	1	1	5
	Lorain	30,308										
and	Total 27th dis.	50,400										
29	Ashland	21,933	104,849	28,703	143,515	1	1	1	1	1	2	6
	Richland	32,516										
	Total 29th dis.	54,419										
30	Huron	28,532	95,585	19,439	97,195	1	1	1	1	1	2	6
	Erie	28,188										
	Sandusky	25,504										
	Ottawa	13,361										

APPORTIONMENT—SENATE—Continued.

3

2

2

2

*Fraction over three full ratios.

ROSTER
OF
COUNTY OFFICERS.

Counties.	County seats.	Probate Judges.	Clerks of Courts.
Perry	New Lexington ..	John H. Kelly	John H. Marlow.
Pickaway	Circleville	Henry N. Hedges	Peter W. Brown.
Pike.....	Waverly	George Kerns	John P. Douglass.
Portage.....	Ravenna	Gideon Seymour	John Mehary.
Preble.....	Eaton.....	Andrew L. Harris	John Townsend.
Putnam	Ottawa	S. S. Bacon	J. J. Zeller.
Richland	Mansfield	Eckels McCoy.....	Thomas T. Dill.
Ross	Chillicothe	Benjamin F. Stone	Edwin W. Pearson.
Sandusky	Fremont	E. F. Dickinson	B. C. Winters.
Scioto	Portsmouth	H. C. Turkey	Robert Bell.
Seneca	Tiffin	Jacob F. Bunce	Jeremiah Rex.
Shelby	Sidney	William C. Wyman	Dennis Mulvihill.
Stark	Canton	A. W. Heldenbrand	John T. Hays.
Summit	Akron	S. C. Williamson	Samuel Nash.
Trumbull	Warren	Wilbur A. Reeves	Oscar A. Caldwell.
Tuscarawas	New Philadelphia.	Alexander H. Brown...	Jacob Degrief.
Union	Marysville	John B. Coats	W. M. Wright.
Van Wert	Van Wert.....	W. H. Mosure.	George W. Day
Vinton	McArthur	Joseph Kaler	John C. Cooney.
Warren.....	Lebanon	Joseph W. O'neall	Lot Wright.
Washington	Marietta	Cornelius F. Frazier ...	Christian H. Etz.
Wayne	Wooster	John P. Jeffries	George Power.
Williams	Bryan.....	Martin Perkey	W. H. Chilcote.
Wood	Bowling Green...	John Reed	W. S. Eberly.
Wyandot	Upper Sandusky..	Joel W. Gibson	Robert D. Dumm.

Counties.	County seats.	Sheriffs.	Prosecuting Attorneys.
Ottawa	Port Clinton	Reuben Grant	George W. Keightley.
Paulding	Paulding	Jasper A. Ferguson	Medary D. Mann.
Perry	New Lexington ..	Henry Martin	Joseph G. Huffman.
Pickaway	Circleville	Chase F. Hartmeyer ...	Charles J. Delaplaine.
Pike	Waverly	Philip Buchert	Sidney A. Steadman.
Portage	Ravenna	Benjamin F. Keller	Osman S. Ferris.
Preble	Eaton	Wm. H. Snyder	Winfield Freeman
Putnam	Ottawa	Josiah Markley	James T. Leutzky.
Richland	Mansfield	James Ritchey	John C. Burns.
Ross	Chillicothe	Thomas L. Mackey	Albert Douglas, Jr.
Sandusky	Fremont	Charles F. Pohlman	John F. Garver.
Scioto	Portsmouth	Thomas J. Pursell	H. W. Farnham.
Seneca	Tiffin	Lloyd Lease	Guilford B. Keppel.
Shelby	Sidney	Alexander Ramsey	George A. Marshall.
Stark	Canton	John P. Rauch	Robert S. Shields.
Summit	Akron	Samuel Lane	Edward W. Stuart.
Trumbull	Warren	Sidney F. Bartlett	Thomas J. Gillmer.
Tuscarawas	New Philadelphia ..	Joseph S. Lyons	Jasper H. Mitchell.
Union	Marysville	Justus J. Miller	P. L. Woodburn.
Van Wert	Van Wert	Jesse R. Stilth	Wm. H. Cunningham.
Vinton	McArthur	Wm. Cottrell	Charles L. White.
Warren	Lebanon	Jasper M. Johnson	D. Allen.
Washington	Marietta	Wm. F. Steadman	Frank F. Oldham.
Wayne	Wooster	Wm. Coulter	Peter Buehl.
Williams	Bryan	George C. Kober	Robert A. Scott.
Wood	Bowling Green ..	Henry Orrin	Frank A. Baldwin.
Wyandot	Upper Sandusky ..	John M. Houston	Moses H. Kirby.

Counties.	County seats.	Auditors.	Treasurers.
Ottawa	Port Clinton	John W. Mizener.....	Elias Lay.
Paulding	Paulding	Charles Hakes	S. G. Robertson.
Perry	New Lexington ..	Orrin Thacker	Noah Karr.
Pickaway	Circleville	Frank M. Schulze.....	John L. Seal.
Pike	Waverly	Van H. Bond	John Rader.
Portage	Ravenna	Wm. Grinnell	Nathan H. Smith.
Preble	Eaton	Samuel Oldfather	Samuel S. Dix.
Putnam	Ottawa	Lewis Lehmkuhle	Hugh L. McDowell.
Richland	Mansfield	Marion D. Ward	Merchant Carter.
Ross	Chillicothe	Frank J. Esker	Stanislans Burkley.
Sandusky	Fremont	Adam Hodes	Elias Moore.
Scioto	Portsmouth.....	W. H. H. Cadot.....	B. R. Miles.
Seneca	Tiffin	Victor J. Zahm	John W. Barrack.
Shelby	Sidney	Orlando O. Mathers	Joseph S. Laughlin.
Stark	Canton	Wm. A. Creech.....	Timothy Sullivan.
Summit	Akron	Edward Buckingham ..	Viele H. Clarence.
Trumbull	Warren	Ralza C. Rice	Timothy W. Case.
Tuscarawas	New Philadelphia	Abraham R. Holmes....	John A. Wagner.
Union	Marysville	W. L. Curry	George W. Court.
Van Wert	Van Wert	Wm. T. Exline	James Montgomery.
Vinton	McArthur.....	John T. Foreman	Thomas H. Craig.
Warren	Lebanon	Charles W. Randall	Martin A. Jameson.
Washington	Marietta.....	Benjamin J. McKinney.	Wm. R. Goddard.
Wayne	Wooster	John Bruce Wilson.....	Lewis P. Ohliger.
Williams	Bryan	George Rings	Elisha M. Ogle.
Wood	Bowling Green...	Samuel Case.....	A. M. Russel.
Wyandot.....	Upper Sandusky.	Landline Smith.....	George W. Biles.

INCORPORATIONS
AND
CHANGES IN INCORPORATED COMPANIES,
FOR THE YEAR ENDING NOVEMBER 15, 1879.

LINE, WITH DATE OF FILING CERTIFICATE, TERMINI, COUNTIES THROUGH WHICH THE
FROM NOVEMBER 15, 1878, TO NOVEMBER 15, 1879.

Termini of road.	Counties through which the railroads pass.	Amount of capital stock.	Number.
Jeffersonville and Cincinnati.	Clinton, Warren, Hamilton, Fayette, Greene .....	.....	1
Buah's Station and Columbus.	Fairfield, Franklin—Branch Road. ....	.....	2
Columbus and Pomeroy, via Logan.....	.....	.....	3
.....	Fixing western terminus at Willsboro, Van Wert Co. ....	.....	4
Buford and Aberdeen.	Highland, Brown—Branch Road.	\$75,000	5
.....	Changing northern terminus from Youngstown to Canton. ....	.....	6
		\$75,000	

DATE, LOCATION, AND AMOUNT OF CAPITAL STOCK, FROM NOV. 15, 1878, TO NOV. 15, 1879.

Location.	Amount of capital stock.	Number.
Middletown to Madison	\$10,000	1
Cincinnati	100,000	2
"	25,000	3
"	25,000	4
"	10,000	5
	\$170,000	

CERTIFICATE, COUNTY WHERE LOCATED, AND AMOUNT OF CAPITAL STOCK, FROM
TO NOVEMBER 15, 1879.

Termini.	Amount of capital stock.	Number.
New Palestine and Lindale.....	\$3,000	1
" " (supplemental)	3,000	2
	\$6,000	

NAMES OF PLANK-ROAD COMPANIES INCORPORATED, WITH DATE OF FILING
FROM NOVEMBER 15, 1878,

Number.	Date of filing cer- tificate.	Name of company.	County where located.
1	1878. Dec. 17	Newburgh and Warrensville Plank-road Co.....	Cuyahoga
2	1879. Jan. 21	" " "	"

NAMES OF BANKS, SAVINGS AND LOAN ASSOCIATIONS INCORPORATED, WITH DATE
FROM NOVEMBER 15, 1878, TO

Number.	Date of filing cer- tificate.	Name of bank or loan association.
1	1879 June 20	Commercial Bank of Cincinnati
2	July 7	The South Cleveland Banking Co.....

NAMES OF FIRE INSURANCE COMPANIES INCORPORATED, WITH DATE OF
FROM NOVEMBER 15, 1878.

Number.	Date of filing cer- tificate.	Name of company.
1	1879. Jan. 21	Eagle Mutual Fire Insurance Co.....
2	28	The Kenton Mutual Fire Insurance Co
3	May 21	The Darke County Fire Insurance Co

CERTIFICATE, COUNTY WHERE LOCATED, AND AMOUNT OF CAPITAL STOCK,
TO NOVEMBER 15, 1879.

Termini.	Amount of capital stock.	Number.
In Cayahoga	\$16,000	1
“ (supplemental)	16,000	2
	\$32,000	

OF FILING CERTIFICATE, LOCATION, AND AMOUNT OF CAPITAL STOCK, FROM NO-
NOVEMBER 15, 1879.

Location.	Amount of capital stock.	Number.
Cincinnati (reorganized under free banking act)	\$200,000	1
Cleveland	50,000	2
	\$250,000	

FILING CERTIFICATE, LOCATION, AND AMOUNT OF CAPITAL STOCK,
TO NOVEMBER 15, 1879.

Location.	Amount of capital stock.	Number.
Mt. Vernon	\$50,000	1
Kenton	50,000	2
Greenville	100,000	3
	\$200,000	

NAMES OF PRINTING AND PUBLISHING COMPANIES INCORPORATED, WITH DATE
NOVEMBER 15, 1878,

Number.	Date of filing cer- tificate.	Name of company.
	1879.	
1	May 5	Daily Labor Publishing Co.....
2	12	M. Halstead & Co.....
3	23	Democrat Publishing Co.....
4	July 18	Jackson Register Co.....
5	Aug. 2	The Ohio Press Co.....
6	Oct. 13	The Journal of Science Publishing Co.....

NAMES OF GAS COMPANIES INCORPORATED, WITH DATE OF FILING CERTIFICATE, 1878.

Number.	Date of filing cer- tificate.	Name of company.
	1878.	
1	Dec. 20	The Lebanon Coal Gas Co.....
	1879.	
2	Jan. 8	Elyria Gas and Water Co.....
3	Aug. 1	Citizen's Gas-Light Co.....
4	22	The Delphos Gas-Light Co.....
5	22	The Van Wert Gas-Light Co.....
6	23	The Van Wert Gas-Light Co.....

NAMES OF "COMMON CARRIER" COMPANIES INCORPORATED, WITH DATE
FROM NOVEMBER 15, 1878,

Number.	Date of filing cer- tificate.	Name of company.
	1879.	
1	Feb. 13	The Cincinnati Railroad Omnibus Co.....

COMPANIES INCORPORATED FOR VARIOUS PURPOSES—Continued.

Number.	Date of filing cer- tificate.	Name of company.
	1879	
58	Sept. 23	The Ohio and Kanawha River Tow Boat Co.....
59	Oct. 1	Chicago Grain and Provision Exchange.....
60	22	The Musical Club.....
61	23	The Miamisburg and Farmersville Telephone Co
62	28	The Central Ohio Stock Yard Co.....
63	Nov. 5	Powhattan Steam Ferry Co.....
64	10	The Bell Telephone Exchange
65	10	The Miamisburg and Farmersville Telephone Co
66	14	The Memphis and Ohio River Packet Co.....

Location.	Purpose of organization.	Amount of capital stock.	Number.
Pomeroy	River transportation	\$2,000	58
Toledo	Grain and commission business.....	100,000	59
Cincinnati	Cultivating taste for music.....	1,500	60
Miamisburg and Farmersville ...	Erecting and using a telephone.....	350	61
Columbus	General stock-yard business.....	25,000	62
Powhattan	Ferrying across the Ohio River	5,000	63
Cleveland	Erecting and using a telephone	50,000	64
Miamisburg and Farmersville ...	“ “ (supplemental)	600	65
Cincinnati	River transportation	20,000	66
		\$2,066,830	

NAMES OF CITIES AND VILLAGES INCORPORATED,

AND TO WHICH TERRITORY HAS BEEN ANNEXED, WITH DATE OF FILING COPIES OF PROCEEDINGS AND PLATS, FROM NOVEMBER 15, 1878, TO NOVEMBER 15, 1879.

Number.	Date of filing	Name of city or village.	County.	Remarks.
	1878.			
1	Nov. 20	Salesville	Guernsey	Village.
2	27	New Lebanon	Montgomery	"
3	Dec. 9	West Mansfield	Logan	"
4	9	Crestline	Crawford	Annexation of territory.
	1879.			
5	Jan. 2	Uniontown	Muskingum	" "
6	Feb. 13	New Concord	Guernsey	" "
7	Mar. 13	Euclid	Cuyahoga	Surrender of corporate rights.
8	19	Mentor	Lake	Annexation of territory.
9	Jan. 4	Galion	Crawford	Advanced to city of 4th grade 2d class.
10	May 9	Greenwich	Huron	Village.
11	20	Centerville	Montgomery	Hamlet.
12	30	West Chester	Tuscarawas	Village.
13	June 21	New Concord	Guernsey	Annexation of territory.
14	21	Wharton	Wyandot	Change of name and annexation.
15	24	Roseville	Muskingum	Annexation of territory.
16	July 17	Rising Sun	Wood	Village.
17	25	Home City	Hamilton	"
18	Aug. 19	Dalton	Wayne	Annexation of territory.
19	Sept. 3	Plain City	Madison	" "
20	Oct. 25	East Cleveland	Cuyahoga	Surrender of corporate rights.

STATIONERY ACCOUNT.

NOVEMBER 15, 1878, TO NOVEMBER 15, 1879.

Brooms (wisp).	Cost.	Sponges (large).	Cost.	Sponges (small).	Cost.	Sponge cups.	Cost.	Rubber bands—gross.	Cost.
35	\$8 75	8	\$4 00	164	\$13 36	2	\$0 40	265½	\$175 73½
						72	18 00	432	141 94
								48	33 00
								2	6 19
102	25 50	48	27 00	76	13 00				
								205	20 85
137	\$34 25	56	31 00	240	26 36	74	18 40	951½	\$377 01½
		1	\$0 50	6	\$1 50	1	\$0 25	2	\$1 65
								1	06
1	\$0 25							12	9 19
20	9 75	7	3 50	18	1 80	6	1 50	48	10 65
4	1 00	3	1 50	1	25			152	41 93
3	75	1	50					9	6 10
2	50			5	50			20	9 09
				6	1 50			5	1 91
1	1 25	1	50	2	20			21	5 73
		3	1 50	36	8 40			7	3 55
15	3 75	4	2 00	14	1 84			22	8 71
3	75			1	07			9	6 29
		1	50	5	50	2	50	17	3 30
								1	67
								4	2 71
7	1 75	1	50	12	2 10			6	3 19
2	50	1	50	2	20			2	1 30
1	25			1	10	1	25	1	75
		1	50					1	88
		5	2 75	8	1 10	2	40	2½	3 97
5	1 25								
83	\$20 75	29	\$14 75	117	\$15 06	12	\$2 90	351½	\$122 83
54	\$13 50	27	\$16 25	123	\$11 30	62	\$15 50	599½	\$254 18½

Soap-cakes.	Cost.	Matches—boxes.	Cost.	Tumblers—number.	Cost.	Paper fasteners.	Cost.	Eyelets—boxes.	Cost.	Pen racks.	Cost.
54	\$109 58			16	\$1 33	11,100	\$21 87	29	\$8 70	25	\$5 00
55	344 20	1,584	\$127 20	24	2 00						
54	22 44										
						36,000	75 50			52	13 00
						5,000	13 00			24	5 00
30½	4 58										
143½	\$480 80	1,584	\$127 20	40	\$3 33	52,100	\$110 37	29	\$8 70	101	\$23 00
252	\$58 20	132	\$11 00			100	\$0 20				
48	10 02	48	4 00			400	76	3	\$0 90		
24	6 00	42	3 50			1,000	1 95				
12	3 00										
12	3 00	36	3 00								
3	75	72	6 00								
18	3 51	96	8 00					6	1 80		
131	20 52	96	8 00			1,000	2 00			3	70
388	85 12	168	14 00	6	\$0 50	1,900	4 54			48	9 80
406	93 22	219	18 25	18	1 50	12,300	28 44				
102	24 51	60	5 00	4	33	100	20				
		12	1 00								
38	9 50	24	2 00								
73	19 22	192	11 20	1	8					1	25
108	25 02	192	16 00			800	1 28				
48	6 06	60	5 00			3,200	6 09				
12	2 01	12	1 00			300	60				
24	6 00	12	1 00			1,000	2 25				
36	9 00	42	3 50					1	30	4	1 00
						100	19	1	30		
6	1 50	24	2 00			200	38				
1,741	\$379 16	1,539	\$123 45	29	\$2 41	22,400	\$42 48	11	\$3 30	56	\$11 75
402½	\$101 64	45	\$3 75	11	\$0 92	22,700	\$60 89	18	\$5 40	45	\$11 25

3

STATIONERY ACCOUNT—Continued.

From whom purchased.	Reporters' pads.	Cost.	Assessors' paper—reams.	Cost.	Requisition books.	Cost.
On hand	17	\$0 96	5	\$37 00	2	\$1 20
J. M. & W. Westwater						
Kilbourne, Jones & Co						
L. C. Aston	232	16 24				
Comly, Francisco & Co	200	20 00				
Bindery	1,440	72 00				
Cleveland Paper Co			80 183-480	759 06		
Short & Forman						
J. R. Mills & Co	960	77 10				
R. H. Gardner & Co						
C. Huston						
Braun & Bruck						
Totals	2,849	\$195 30	85 183-480	\$796 66	2	\$1 20
To whom issued.						
House of Representatives	576	\$32 24			1	\$0 00
Board State Charities	6	30				
Senate	422	24 10				
Railroad Commissioner	52	3 08				
School Commissioner	15	1 05				
Adjutant-General	25	1 25	1	\$7 50		
Codifying Commission	120	7 20				
Treasurer of State	84	4 80				
Board of Agriculture	36	2 04				
Supreme Court	90	7 56				
Supreme Court Clerk	51	2 73				
Supreme Court Commission	48	2 40				
Secretary of State	164	10 55				
Executive Department	48	2 40				
Auditor of State	58	3 74	82 123-480	773 16		
State Library	24	1 20				
Fund Commissioners						
Board of Public Works	37	2 38				
Attorney-General	44	2 46				
Insurance Department	12	60				
Bureau Labor Statistics	12	72				
Mines Inspector	3	15				
Supervisor Public Printing	2	1 16				
Law Library	6	42				
Total issued	1,935	\$114 53	83 123-480	\$780 66	1	\$0 00
On hand	914	\$80 77	24	\$15 98	1	\$0 00

DEPARTMENT OF STATE,

BUREAU OF STATISTICS.

STATISTICAL REPORT

OF THE

SECRETARY OF STATE,

TO THE

GENERAL ASSEMBLY OF OHIO,

FOR THE YEAR 1879.

OFFICE OF THE SECRETARY OF STATE,
COLUMBUS, OHIO, *January 5, 1890.*

To the General Assembly of Ohio :

In compliance with the statute, which provides that it shall be the duty of the Secretary of State, annually, to prepare, from the official reports and from whatever other reliable sources to which he may obtain access, as full, accurate, and intelligible tables of the statistics of the State as may be in his power, and report the result of his labors to the General Assembly at its next meeting, I have the honor herewith to submit my third annual report, being for the year ending November 15, 1879.

Very respectfully,

Your obedient servant,

MILTON BARNES,

Secretary of State.

ELECTION STATISTICS OF OHIO.

VOTE ON GOVERNOR—Continued.

Year.	Names.	Vote.	Total vote.
1832	Robert Lucas	71,251	134,409
	Darius Lyman	63,186	
	Scattering	—	
1834	Robert Lucas	70,738	138,190
	James Pindley	67,414	
	Scattering	38	
1836	92,204	178,568
	.....	86,158
	.....	200
1839	Wilson Shannon	107,884	210,037
	Joseph Vance	102,146	
	Scattering	7	
1840	145,442	274,762
	.....	129,321
	Scattering	8	
1842	Wilson Shannon	119,774	242,850
	.....	117,902
	.....	5,134
	.....	40
1844	146,333	300,304
	.....	145,062
	.....	8,898
	Scattering	11	
1846	118,869	246,186
	.....	116,484
	.....	10,797
	.....	46
1848	Seabury Ford	148,250	297,075
	John B. Weller	147,888	
	Scattering	939	
1850	Reuben Wood	133,093	269,039
	William Johnson	131,105	
	Edward Smith	13,747	
	Scattering	93	

TWENTIETH DISTRICT.

Counties.	Amos Townsend.	Joseph M. Poe.	William H. Doan.	Gilbert O. Shove.
Cuyahoga	13,081	7,271	2,085	4,934
Majority	5,810			

EDUCATIONAL STATISTICS.

17

J. L. STATISTICS,

EDITED BY CLERKS OF COURTS.

JUDICIAL STATISTICS,

AS REPORTED BY CLERKS OF COURTS.

SOCIAL STATISTICS,

AND

STATISTICS OF BENEVOLENT AND REFORMATORY INSTITUTIONS.

IMMIGRATION INTO THE UNITED STATES FROM 1861 TO 1878.

During the year 1878 the number of persons of foreign birth who emigrated to the United States was 153,207 ; the number who arrived in 1877 was 130,526 : the increase in 1878 over 1877 was, therefore, 22,681. This increase is another evidence of the improvement in business in the United States in 1878.

The following table, compiled by the Secretary of the American Iron and Steel Association—from the reports of the Bureau of Statistics, shows the number of emigrants who have arrived in the United States in each year since 1861 :

Calendar years.	Number of immigrants.	Calendar years.	Number of immigrants.
1861	89,720	1870	356,303
1862	89,005	1871	346,938
1863	174,523	1872	437,750
1864	193,191	1873	422,545
1865	248,394	1874	260,614
1866	314,840	1875	191,231
1867	293,601	1876	157,440
1868	289,145	1877	130,526
1869	385,287	1878	153,207

LETTERS OF GUARDIANSHIP IN OHIO, ETC--Continued.

NUMBER OF PERSONS SENT TO OHIO HOSPITALS FOR THE INSANE—Continued.

Counties.	White.		Colored.		Total.
	Males.	Females.	Males.	Females.	
Monroe	2	3	.....	.....	5
Montgomery	31	28	.....	1	60
Morgan	1	2	.....	.....	3
Morrow	3	2	.....	.....	5
Muskingum	15	7	.....	.....	22
Noble	3	2	.....	.....	5
Ottawa	4	2	.....	.....	6
Paulding	6	3	.....	.....	9
Perry	5	9	.....	.....	14
Pickaway	9	13	.....	1	23
Pike	3	.....	1	.....	4
Portage	7	3	.....	.....	10
Preble	2	4	.....	.....	6
Putnam	5	5	.....	.....	10
Richland	7	7	.....	.....	14
Ross	6	9	1	.....	16
Sandusky	7	7	.....	.....	14
Scioto	1	3	.....	1	5
Seneca	*	*	*	*	13
Shelby	1	1	.....	.....	2
Stark	8	19	.....	.....	27
Summit	9	9	.....	.....	18
Trumbull	12	6	.....	.....	18
Tuscarawas	4	4	.....	.....	8
Union .....	.....	.....	.....	.....	.....
Van Wert	3	.....	1	.....	4
Vinton	1	2	.....	.....	3
Warren	7	7	.....	.....	14
Washington	3	5	.....	.....	8
Wayne	7	7	.....	.....	14
Williams	6	3	.....	.....	9
Wood	9	2	.....	.....	11
Wyandot	5	4	.....	.....	9
Totals	661	570	14	13	1,271

* Not reported.

ENDING MARCH 31, 1879.

1879

1879

1879

1879

1879

1879

1879

1879

TABLE SHOWING THE NUMBER OF BOYS SENT TO REFORM SCHOOLS, ETC.—Continued.

TABLE EXHIBITING THE NUMBER OF GIRLS SENT TO THE INDUSTRIAL HOME AT WHITE SULPHUR SPRINGS BY THE PROBATE JUDGE OF EACH COUNTY IN OHIO FOR THE YEAR ENDING MARCH 31, 1879.

Counties.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to 12.	12 to 13.	13 to 14.	14 to 15.	15 to 16.	Total
Allen				1						1
Belmont								2		2
Butler				1			2			3
Clarke							1			1
Clinton			1							1
Coshocton					1					1
Crawford		1		1						2
Cuyahoga				1	1	2		3	3	10
Franklin					2	2	1	1	2	8
Fulton			1			1				2
Geauga				1						1
Greene								1		1
Hamilton						1		1		2
Hardin						1				1
Knox								1		1
Lake								1		1
Licking					1	1				2
Logan						1				1
Lucas					3	1				4
Mahoning				2	1	2				5
Marion				1						1
Monroe				1						1
Montgomery									1	1
Muskingum					1	3	3	1		8
Ross	1								1	2
Scioto				1						1
Shelby			2							2
Stark					1					1
Tuscarawas							1			1
Warren					1		1			2
Wayne					1					1
Totals	1	1	4	10	13	15	9	11	7	71

ANNUAL REPORT OF THE SUPERINTENDENT OF THE OHIO INSTITUTION FOR THE EDUCATION OF IMBECILE YOUTH, COLUMBUS, OHIO, FROM NOVEMBER 15, 1878, TO NOVEMBER 15, 1879.

	Males.	Females.	Total.
Number of pupils in the institution November 15, 1878...	285	190	475
" " admitted during the year	24	9	33
Total number current year	309	199	508
Number discharged	20	22	42
Number died	4	5	9
Number remaining in the institution November 15, 1879..	285	174	459

Mortuary Record, November 15, 1878, to November 15, 1879.

	Consumption.	Convulsions.	Paralysis.	Spinal disease.	Bronchitis.	Total number of deaths.
Males	1	2	—	1	—	4
Females	2	—	1	1	1	5

Age of Inmates Admitted Current Year.

Cause of Insanity.

/ Mortuary Record, November 15, 1878, to November 15, 1879.

Age of Patients Admitted Current Year.

	Under 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.
Males	1	12	52	11	32	27	13	6
Females	3	6	35	62	49	31	5	1

Crimes—Continued.

Mortuary Record, November 15, 1878, to November 15, 1879.

Age of Convicts Received Current Year.

	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.
.....	25	5	57	275	183	50	9	5	1
.....	.....	.....	.....	11	.....	.....	.....	.....	.....

VITAL STATISTICS

AND

NOSOLOGY OF OHIO.


















































10

[illegible]

VITAL STATISTICS.

	4	5	1	3	2	1	2	1	1	2	29	22	15	263	266	14,710	13,149	320	26,179
Pike	4	5	1	3	2	1	2	1	1	2	29	22	15	263	266	14,710	13,149	320	26,179
Portage	20	10	7	9	6	3	2	3	1	3	94	92	227	381	245	484	535	664	
Preble	2	6	3	9	4	3	4	3	1	3	3	2	3	3	3	2	10	2	
Putnam	5	3	1	3	4	3	2	3	1	3	3	2	3	3	3	2	6	1	
Richland	7	6	7	9	5	2	2	2	1	2	3	3	3	4	4	3	12	16	
Ross	13	3	7	4	1	3	4	3	1	3	3	3	3	4	3	3	10	1	
Sandusky	2	2	2	4	3	3	4	3	1	3	3	3	3	4	3	3	10	1	
Scioto	4	2	4	4	2	3	4	3	1	3	3	3	3	4	3	3	10	1	
Seneca	8	3	8	3	1	3	4	3	1	3	3	3	3	4	3	3	10	1	
Shelby	7	2	1	5	2	1	1	1	3	3	3	3	3	4	3	3	10	1	
Stark	12	9	11	6	1	2	1	1	4	2	3	3	3	4	3	3	10	1	
Summit	9	7	17	6	1	4	1	1	1	1	3	3	3	4	3	3	10	1	
Trumbull	10	16	15	6	9	5	4	3	1	2	3	3	3	4	3	3	10	1	
Tuscarawas	6	5	3	4	2	5	3	3	2	2	3	3	3	4	3	3	10	1	
Union	2	3	2	3	1	1	1	1	1	1	3	3	3	4	3	3	10	1	
Van Wert	5	4	3	1	1	1	1	1	1	1	3	3	3	4	3	3	10	1	
Vinton	4	7	1	3	1	2	2	2	1	2	3	3	3	4	3	3	10	1	
Warren	12	5	5	4	5	2	2	2	3	2	3	3	3	4	3	3	10	1	
Washington	18	10	12	13	9	6	3	3	3	2	3	3	3	4	3	3	10	1	
Wayne	9	12	1	3	4	4	2	2	2	1	3	3	3	4	3	3	10	1	
Williams .....	.....	4	2	3	.....	.....	.....	.....	1	.....	.....	.....	.....	4	3	3	10	1	
Wood	10	5	7	4	1	.....	1	.....	.....	1	.....	.....	.....	4	3	3	10	1	
Wyandot	7	6	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	4	3	3	10	1	
Totals	664	535	484	381	245	227	94	92	29	22	15	263	266	14,710	13,149	320	26,179		

TABLE SHOWING THE NATIVITY OF DECEASED PERSONS, AS REPORTED BY THE PROBATE JUDGE OF EACH COUNTY IN OHIO, FOR THE YEAR
ENDING MARCH 31, 1879.

MISS

.....

TABLE EXHIBITING THE OCCUPATION OF DECEASED PERSONS AT TIME OF DEATH IN EACH COUNTY IN OHIO, AS REPORTED BY THE PROBATE JUDGES, FOR THE YEAR ENDING MARCH 31, 1879.

TABLE

TABLE

TABLE

TABLE

Franklin.....
 Fulton.....
 Gallia.....
 Geauga.....
 Greene.....
 Guernsey.....
 Hamilton.....
 Hancock.....
 Hardin.....
 Harrison.....
 Henry.....
 Highland.....
 Hocking.....
 Holmes.....
 Huron.....
 Jackson.....
 Jefferson.....
 Knox.....
 Lake.....
 Lawrence.....
 Licking.....
 Logan.....
 Lorain.....
 Lucas.....
 Madison.....
 Mahoning.....
 Marion.....
 Medina.....
 Meigs.....
 Mercer.....
 Miami.....
 Monroe.....
 Montgomery.....
 Morgan.....
 Morrow.....
 Muskingum.....
 Noble.....
 Ottawa.....
 Paulding.....
 Perry.....
 Pickaway.....
 Pike.....

1

[illegible]

DEATHS IN EACH COUNTY, ETC.—Continued.

Class 3.—Local diseases.

Order 5.—Urinary organs.

[illegible]

NOSOLOGICAL ARRANGEMENT, SHOWING THE NUMBER AND

Counties.	Class 3.—Local diseases.					
	Order 6.—Generative organs.					
	1. Ovarian drop- sy.		2. Diseases of the womb, etc.		Total deaths, Order 6, Class 3.	
	M.	F.	M.	F.	M.	F.
Adams						
Allen		1				1
Ashland						
Ashtabula						
Athens						
Auglaize						
Belmont				2		2
Brown						
Butler						
Carroll						
Champaign						
Clarke						
Clermont						
Clinton						
Columbiana				1		1
Coshocton						
Crawford				1		1
Cuyahoga		2				2
Darke				1		1
Defiance				1		1
Delaware						
Erie						
Fairfield						
Fayette						
Franklin						
Fulton				1		1
Gallia		4		2		6
Geauga		1				1
Greene						
Guernsey		3				3
Hamilton						
Hancock						
Hardin		2				2
Harrison						
Henry						
Highland		1				1
Hocking						
Holmes				1		1
Huron						
Jackson		1				1
Jefferson						
Knox						
Lake						
Lawrence						
Licking		1				1
Logan						

CAUSES OF DEATHS IN EACH COUNTY, ETC.—Continued.

Class 4.—Developmental diseases.

Order 2.—Developmental diseases of adults.						Order 3 —Developmental diseases of old people.		Order 4.—Developmental diseases of nutrition.	
1. Paramenia (menstrual disease)		2. Childbirth.		Total deaths, Order 2, Class 4.		Old age.—Total deaths, Order 3, Class 4.		Atrophy and debility.— Total deaths, Order 4, Class 4.	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
.....	2	.....	2	6	7	.....	.....
.....	6	.....	6	8	8	.....	.....
.....	3	.....	3	11	10	1	.....
.....	3	.....	3	13	19	.....	3
.....	1	.....	1	8	7	.....	.....
.....	9	9	.....	.....
.....	2	.....	2	11	10	.....	1
.....	2	.....	2	12	8	.....	.....
.....	1	.....	1	7	11	.....	.....
.....	5	4	.....	1
.....	1	.....	1	7	.....	1	.....
.....	5	.....	5	5	5	4	2
.....	3	.....	1	.....	4	22	24	.....	.....
.....	2	.....	2	2	6	.....	.....
.....	3	.....	3	8	15	.....	.....
.....	1	.....	1	5	3	.....	1
.....	1	.....	1	13	12	.....	.....
.....	3	.....	3	35	39	.....	3
.....	5	.....	5	.....	11	.....	.....
.....	6	.....	1
.....	8	.....	1
.....	1	.....	1	9	7	.....	.....
.....	3	.....	3	13	5	1	.....
.....	3	2
.....	4	.....	6	.....	10	4	10	.....	.....
.....	1	.....	3	.....	4	.....	2	.....	.....
.....	3	7	.....	.....
.....	1	.....	1	5	13	.....	.....
.....	1	.....	1	6	7	2	1
.....	5	3	.....	.....
.....	3	.....	3	31	50	2	9
.....	3	.....	3	4	5	.....	.....
.....	9	.....	9	8	8	.....	.....
.....	8	5	.....	.....
.....	1	.....	1	3	7	.....	2
.....	1	.....	.....	.....	1	3	1	9	7
.....	2	.....	2	7	3	.....	.....
.....	1	.....	1
.....	1	.....	2	.....	3	13	18	1	1
.....	1	.....	1	.....	2	5	5	.....	.....
.....	10	6	4	5
.....	4	6	.....	.....
.....	2	.....	2	7	6	.....	.....
.....	1	.....	1	7	5	.....	.....
.....	3	.....	3	11	15	3	1
.....	2	.....	2	.....	4	4	7	.....	2

NOSOLOGICAL ARRANGEMENT, SHOWING THE NUMBER AND

Class 5.—Violent deaths

Order 1.—Accident or negligence.

Counties.	1. Fractures and contusions.		2. Burns and scalds.		3. Poison.		4. Drowning (and lost at sea.)		5. Suffocation and strangulation.		6. Otherwise.		Total deaths, Order 1, Class 5.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Adams											1	1	1	1
Allen			2							2	9	2	11	4
Ashland									1		6		7	
Ashtabula	2	1					1	1			5	1	8	3
Athens			1	2		1							1	3
Auglaize											5		5	
Belmont			3	4			3				10	1	16	5
Brown			2		1		1						4	
Butler			1	1			1				3	1	7	2
Carroll			1			1					2	1	3	1
Champaign				1	1						4		4	1
Clarke	1	2					1		1	2		1	2	3
Clermont	4									1			4	1
Clinton	1	1					2				1	1	4	2
Columbiana			4				1	1			3	1	5	2
Coshocton				1						1			1	
Crawford				2							2		2	
Cuyahoga	18	5	1	1	1		3	2	2		1	2	20	5
Darke			1						3		1	2	6	
Delaware											2		2	
Delaware											3		3	
Erie							1						1	
Franklin	1			1							1		2	
Fayette						2					2		2	
Franklin			3								5		8	
Fulton							1						1	
Gallia	1												1	
Geauga											1		1	
Greene	3						1						4	3
Greene							1						1	
Hamilton	32	7	8	1	1	1	1	2	2	4	77		138	51
Hartwick				2		1		1	2	2			2	4
Hardin							1						1	
Herriker		1												1
Hocking			1								2	1	3	2
Highland	1		1	2			1		1		3	1	7	2
Hocking									2		1		3	
Holmes							1		2		1		2	
Huron	5	2	1				1		1		2		10	
Jackson			1	3							2	2	5	
Jefferson			5	1			1				3	2	14	
Knox				1							3		3	
Lake		1												1
Lawrence	1		3	2	1		1			1	3		9	3
Licking	1	1		3	1		2				4	1	8	5
Logan											6	1	6	1

DEATHS IN EACH COUNTY, ETC.—Continued.

Class 5.—Violent deaths.

Order 3.		Order 4		Order 5.		Order 6.		Order 7.		Total deaths, Orders 2, 3, 4, 5, 6, and 7, Class 5.	
Homicide.		Suicide.		Execution.		All other violent deaths.		Sudden deaths and causes unknown.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		2						2		4	
		2	2					42	25	41	27
						1		13	10	14	10
								10	13	10	13
1			1			3				4	1
								5	6	6	6
								8	6	8	6
						4		41	37	45	37
								13	7	13	7
3		7				2		29	12	41	12
			1					7	9	7	10
								11	18	11	18
1		2				5	2	11	15	19	17
1		1						2	3	5	3
						1		18	9	19	9
		1						29	19	30	19
2								25	23	27	23
								45	29	45	29
						1		18	14	19	14
			2					1	1	1	3
		3								3	
	1		1			5		32	21	37	23
				1					2	1	2
			1					23	14	28	15
		2								2	
		1				7		26	31	34	31
		1								1	
		2						33	17	35	17
		2	1			4	2	31	27	37	30
1		5				2		10	17	18	17
		2						1	4	3	4
		2				7				9	
		1		1				19	14	21	14
								15	19	15	19
		1	1					7	18	8	19
1		2				3	1	12	19	18	20
		2				1		3	13	6	13
		2				1		17	8	20	8
		1						2	1	3	1
		1						5	4	6	4
27	5	81	15	4		83	17	1250	1083	1448	1123

ICES OF THE PEACE FOR THE YEAR ENDING JUNE 30, 1879.

Number of inquests held by coroners for the year ending June 30, 1879.									Superinduced by intemperance.
Suicide.	Killed by accident.	Other sudden deaths, and deaths from unknown causes.	Males.	Females.	Number foreign born.	Number native born.	Nativity unknown.	Total.	
.....
.....
.....	6	1	6	1	4	3	.....	7	1
2	2	4	.....	.....	2	3	3	8	1
1	3	.....	4	.....	1	3	.....	4	2
2	7	.....	9	.....	2	7	.....	9	.....
.....	1	.....	1	.....	1	.....	.....	1	1
1	2	3	5	1	2	4	.....	6	2
.....	.....	1	2	.....	1	1	1	2	.....
1	.....	1	2	2	3	1	.....	4	.....
1	3	.....	5	.....	2	3	.....	5	2
.....	.....	.....	1	.....	.....	1	.....	1	.....
3	1	.....	4	.....	4	4	.....	4	.....
17	57	1	66	14	36	43	1	80	.....
.....	1	.....	2	.....	2	.....	.....	2	1
.....	1	.....	1	.....	.....	1	.....	1	.....
6	13	1	20	2	17	.....	5	22	8
1	1	1	4	2	3	3	.....	6	.....
6	20	14	34	8	30	6	6	42	.....
2	4	3	9	.....	.....	9	.....	9	3
2	4	.....	6	1	.....	6	1	7	.....
1	.....	.....	1	.....	.....	1	.....	1	.....
.....	4	.....	5	.....	.....	.....	5	5	1
35	48	137	195	32	84	119	24	230	7
1	1	.....	3	.....	1	2	.....	3	.....
4	3	2	7	2	5	4	.....	9	3
.....	1	1	2	.....	.....	2	.....	2	.....
1	.....	.....	1	.....	.....	1	.....	1	.....
.....	7	.....	2	.....	.....	.....	2	2	.....
.....	.....	.....	5	2	.....	7	.....	7	.....
1	.....	1	1	.....	.....	1	.....	1	.....
1	.....	.....	1	.....	.....	1	.....	1	1
4	16	5	16	11	2	1	21	27	2
.....	1	2	3	.....	1	2	.....	3	.....
1	1	.....	1	2	.....	3	.....	4	.....
1	4	.....	5	1	1	5	.....	6	1
4	.....	.....	2	2	.....	4	.....	4	1
.....	1	.....	.....	2	.....	2	.....	2	2
2	15	2	19	1	4	15	1	20	3
11	21	15	37	16	24	30	.....	53	20
.....	.....	3	3	.....	2	1	.....	3	.....

TABLE SHOWING THE NUMBER OF INQUESTS HELD IN OHIO BY CORONERS A

Counties.	Number of inquests held by justices of the peace for the year ending June 30, 1879.				
	Homicide.	Suicide.	Killed by accident.	Other sudden deaths, and deaths from unknown causes.	Total.
Mahoning	2	6	2	5	2
Marion	1				
Medina			1		
Meigs		1		1	
Mercer					
Miami					
Monroe		2	1		
Montgomery	1	3	5	1	
Morgan	1				
Morrow					
Muskingum		1			
Noble	1	1	1		
Ottawa		1		1	
Paulding				3	
Perry	2	3	5	1	
Pickaway					
Pike				1	
Portage			2		
Preble	1				
Putnam		1	1		
Richland		1	4	1	
Ross		2	2	2	
Sandusky			1		
Scioto	1	2	7	1	
Seneca					
Shelby					
Stark					
Summit	1	2	2		
Trumbull		3	1		
Tuscarawas	2	1	6		
Union			1	1	
Van Wert		1	2	1	
Vinton	1	2	1		
Warren	1		1	1	
Washington					
Wayne		1	1		
Williams	1	1			
Wood	1	2		2	
Wyandot	1	1	5	1	
Totals	49	126	207	225	

OF THE PEACE FOR THE YEAR ENDING JUNE 30, 1879—Continued.

PUBLIC DEBTS, PROPERTY,
AND
TAXATION.

BANKS AND BONDS.

RAILROADS, TURNPIKES,
AND
PLANK ROADS.

CONVEYANCE STATISTICS,

AS

REPORTED BY COUNTY RECORDERS.

TABLE SHOWING THE NUMBER OF MORTGAGES, ETC.—Continued.

Counties.	Number of mortgages recorded.	Amount secured.	Number of mortgages canceled.	Amount released.
	No	Amount.	No.	Amount.
.....	292	\$1,608,961	176	\$144,950
omery	1,509	1,620,617	1,141	2,057,693
.....	226	161,584	142	138,856
.....	395	306,914	199	300,691
igum	603	589,741	412	494,723
.....	208	206,851	102	99,777
.....	404	388,662	292	324,948
ng.....	220	125,070	117	43,582
.....	355	261,341	175	43,470
vay	407	490,836	239	390,255
.....	127	107,504	40	21,099
o	728	397,951	550	750,791
.....	477	512,902	172	324,220
m	422	333,582	270	195,034
nd	591	473,400	304	395,636
.....	543	670,683	214	336,810
sky	506	494,916	397	348,566
.....	702	1,006,659	188	166,971
.....	828	137,856	723	126,429
.....	506	383,240	266	232,662
.....	1,019	1,624,225	783	968,341
it	729	876,013	643	898,144
ull	570	557,104	365	656,568
awas	674	473,579	502	479,828
.....	427	479,121	282	368,913
ert	448	201,289	334	216,517
l	141	80,148	71	36,572
n	494	198,313	376	501,759
ngton	521	334,774	294	177,666
.....	605	740,086	393	593,000
ma	481	262,242	272	255,650
.....	673	507,291	361	317,113
dot	444	467,496	327	377,437
Totals	47,336	\$49,648,586	33,030	\$42,364,832

TABLE SHOWING THE SEVERAL AMOUNTS OF RAILROAD MORTGAGES RECORDED AND CANCELED IN OHIO, AS REPORTED BY THE RECORDER OF EACH COUNTY FOR THE YEAR ENDING JUNE 30, 1879.

Name of railroad.	Mortgages recorded.	Mortgages canceled.
Alliance and Lake Erie Railroad	\$150,000	.....
Ashtabula and Pittsburgh Railroad	1,500,000	.....
Central Passenger Railroad Co (street railroad, Toledo)	50,000	.....
Cincinnati and Eastern Railroad	3,500,000	.....
Cincinnati Incline Plane Railroad	125,000	.....
Cincinnati and Muskingum Valley Railroad	1,500,000	.....
Cleveland, Tuscarawas Valley and Wheeling Railroad Co..	700,000	\$1,250,000
Cleveland, Tuscarawas Valley and Wheeling Railroad Co.*	1,600,000	1,200,000
Cleveland and Pittsburgh Railroad .....	.....	200,000
College Hill Railway Co. (street railroad, Cincinnati)	60,000	.....
Columbus, Scioto and Hocking Valley Railroad	1,100,000	.....
Consolidated Street Railway Co. (Cincinnati)	150,000	.....
Delphos and Kokomo Railroad	91,000	.....
Lake Erie and Louisville Railroad	300,000	310,000
Ohio Central Railroad †	1,153,023	.....
Pennsylvania Company † .....	.....	7,000,000
Pittsburgh and Lake Erie Railroad	2,000,000	.....
Scioto Valley Railroad	500,000	.....
Scioto Valley Railroad	1,300,000	.....
Springfield, Jackson and Pomeroy Railroad	900,000	600,000
Springfield, Jackson and Pomeroy Railroad	450,000	219,000
Springfield, Jackson and Pomeroy Railroad **	450,000	.....
Toledo and Ann Harbor Railroad	750,000	.....
Toledo, Delphos and Indiana Railroad	210,000	.....
Toledo, Delphos and Indiana Railroad	210,000	.....
Toledo, Delphos and Indiana Railroad	2,500	.....
Valley Railway Company	1,600,000	4,300,000
Youngstown and Connetton Valley Railroad	750,000	.....
Totals	\$21,102,281	\$15,609,600

NOTE.—As railroad mortgages are recorded and canceled in each county through which the road passes, and as many of the smaller amounts in such mortgages are included in the largest sum named on the same road, it is impossible to give an exact total either in mortgages or cancellations.

* Reported from Stark county.

† Reported from Knox county.

‡ Holmes county reports a cancellation of \$3,000,000 for this company, but as all of the other counties report but \$7,000,000, the latter is presumed to be the correct amount. In some counties, also, this cancellation is reported under the name of the Pittsburgh, Fort Wayne and Chicago Railroad.

** Reported from Ross county.

AGRICULTURAL STATISTICS

NUMBER OF LEASES RECORDED IN EACH COUNTY—Continued.

Counties.	Leases of lands.		Leases of city, town, and village lots.	
	Number.	Amount of consideration.	Number.	Amount of consideration.
Meigs	28	†	18	\$8,775
Mercer	50	†	6	†
Miami	2	\$218	7	4,284
Monroe	—	—	—	—
Montgomery	10	†	35	†
Morgan	2	350	—	—
Morrow	6	2,301	—	—
Muskingum	15	6,120	—	—
Noble	8	1,070	—	—
Ottawa	13	418	38	4,552
Paulding	20	†	—	—
Perry	7	†	3	†
Pickaway	5	3,599	1	100
Pike	6	7,341	—	—
Portage	9	896	—	—
Preble	5	1,840	1	100
Putnam	5	1,000	1	†
Richland	3	600	4	1,550
Ross	—	—	14	18,548
Sandusky	—	—	—	—
Scioto	13	4,312	4	7,000
Seneca	6	975	21	3,400
Shelby	2	2,900	5	14,880
Stark	7	†	20	†
Summit	15	†	14	†
Trumbull	4	†	3	400
Tuscarawas	10	†	5	†
Union	4	†	1	420
Van Wert	10	661	2	3,025
Vinton	—	—	—	—
Warren	1	†	6	5,676
Washington	—	—	—	—
Wayne	8	4,000	—	—
Williams	—	—	—	—
Wood	9	†	4	2,963
Wyandot	4	5,157	5	2,610
Totals	757	\$211,820	1,112	781,147

† Amount not reported.

AGRICULTURAL STATISTICS

WHEAT, RYE, AND BUCKWHEAT PRODUCED IN OHIO IN 1878—Continued.

Counties.	Wheat.		Rye.		Buckwheat.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
.....	6,395	124,272	563	8,650	306	4,677
.....	16,735	114,394	1-1	1,312	62	491
.....	30,900	470,851	1,342	19,085	493	5,603
.....	30,535	569,474	373	5,916	149	1,034
.....	18,796	395,968	227	3,808	20	205
.....	12,406	195,516	509	9,434	908	10,744
.....	9,399	177,741	914	14,438	35	387
.....	11,470	172,141	720	9,604	280	2,356
.....	17,699	334,867	117	1,955	44	507
.....	16,853	331,757	450	7,582	53	411
.....	19,108	210,207	630	5,042	194	2,791
.....	24,381	375,453	560	8,028	109	940
.....	36,672	685,190	692	10,115	94	761
.....	16,805	189,118	2,233	19,924	268	2,222
ry	36,669	584,812	460	6,623	17	156
.....	16,294	236,977	441	4,403	149	1,406
.....	13,696	249,313	661	8,458	130	790
m	28,118	417,277	1,025	13,799	166	1,423
.....	14,852	186,891	597	6,918	81	810
.....	13,680	255,121	356	6,679	79	1,039
.....	7,704	115,367	498	6,405	243	2,244
.....	16,207	209,006	891	10,565	180	1,666
.....	39,637	682,593	521	7,256	50	734
.....	11,570	97,847	203	1,237	68	489
.....	15,823	274,290	604	8,363	192	1,504
.....	29,956	422,757	472	5,958	68	445
.....	22,077	358,613	1,252	19,587	159	1,671
.....	36,000	669,887	730	9,499	143	1,118
.....	31,214	480,717	89	8,406	48	437
.....	41,474	835,523	291	5,075	198	1,689
.....	11,615	114,445	41	183	98	713
.....	59,969	1,235,963	161	2,936	64	628
.....	27,861	454,370	386	5,008	260	1,914
.....	52,925	1,001,666	470	6,779	71	735
.....	25,955	518,979	352	5,150	41	1,830
.....	9,976	161,801	564	6,986	481	4,198
is	32,733	567,480	601	7,310	184	1,147
.....	17,442	308,170	273	4,407	74	633
.....	15,721	251,823	971	12,932	267	2,456
.....	7,599	73,601	328	2,862	177	1,707
.....	26,392	392,482	608	5,915	195	2,270
on	28,916	403,583	2,266	20,896	360	4,036
.....	48,982	1,035,862	403	12,023	62	483
.....	28,597	501,098	228	2,339	198	1,926
.....	24,417	449,296	971	18,060	734	8,377
.....	29,103	633,959	117	1,225	50	698
.....	2,123,988	35,218,783	58,041	756,502	16,153	165,448

OATS, BARLEY AND CORN PRODUCED IN OHIO IN 1878—Continued.

Counties.	Oats.		Barley.		Corn.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Adams	9,446	272,650	96	2,558	36,229	1,371,174
Allen	6,418	145,223	-----	-----	21,291	735,733
Ashtabula	3,299	93,719	157	7,974	13,102	368,540
Aurora	3,688	85,683	228	7,179	11,062	224,960
Baldwin	4,294	98,066	116	6,859	20,642	743,256
Belmont	2,251	72,013	92	3,190	92,076	3,726,238
Berkshire	6,830	126,759	461	15,980	29,847	828,708
Bethesda	14,419	497,068	36	733	13,360	706,966
Bethesda	14,790	462,856	769	22,684	53,747	1,973,987
Bethesda	5,701	153,544	57	1,518	35,773	1,071,659
Bethesda	23,738	806,274	146	4,168	31,243	1,020,412
Bethesda	3,367	67,269	40	1,745	78,169	2,761,170
Bethesda	11,156	373,825	270	6,357	31,213	1,226,374
Bethesda	8,475	135,274	186	5,167	24,085	559,247
Bethesda	16,967	572,663	73	1,697	39,205	1,360,511
Bethesda	16,651	557,904	777	19,266	42,215	1,584,376
Bethesda	25,439	1,018,082	476	15,264	27,748	1,477,532
Bethesda	14,244	542,342	63	14,010	15,422	1,077,945
Bethesda	16,304	561,842	66	4,275	14,998	934,028
Bethesda	18,610	621,542	136	3,252	24,466	822,763
Bethesda	7,300	223,443	4	180	51,430	2,130,561
Bethesda	8,194	226,709	90	2,039	30,056	808,707
Bethesda	3,120	59,977	-----	-----	14,419	375,631
Bethesda	10,007	292,252	5,012	191,402	58,030	2,374,900
Bethesda	10,476	212,610	3	109	25,516	668,193
Bethesda	24,123	912,403	285	6,870	32,416	1,234,570
Bethesda	13,591	437,289	38	1,049	24,900	838,348
Bethesda	14,887	450,618	531	11,880	52,501	1,880,521
Bethesda	8,326	283,180	17	315	35,313	1,360,716
Totals	937,315	29,671,231	38,461	1,265,299	3,039,380	114,839,127

COMPARATIVE TABLE, EXHIBITING THE NUMBER OF BUSHEL OF WHEAT AND CORN PRODUCED ANNUALLY, FROM 1850 TO 1878, INCLUSIVE.

Year.	Bushels of wheat.	Average number of bushels to acre.	Bushels of corn.	Average number of bushels to acre.
1850	31,500,000	18.	56,619,603	36.8
1851	25,309,25	15.2	61,171,22	36.7
1852	23,013,737	14.1	52,165,517	34.6
1853	17,112,311	12.	73,436,070	40.
1854	11,809,110	8.	52,171,551	26.
1855	19,569,320	13.81	27,527,434	39.7
1856	15,333,837	10.2	57,202,515	27.7
1857	25,397,614	14.	22,555,126	26.6
1858	17,655,423	10.4	50,823,582	27.7
1859	13,317,967	7.3	62,730,246	29.5
1860	23,640,356	12.8	91,522,704	34.2
1861	20,055,424	11.	74,822,272	33.5
1862	29,764,827	12.	62,764,227	30.
1863	20,452,410	11.36	54,614,617	27.
1864	15,541,325	9.33	54,023,491	27.
1865	13,234,139	9.	62,053,663	35.
1866	5,224,747	4.50	20,326,320	36.50
1867	13,352,726	11.51	63,275,024	29.24
1868	16,420,059	11.31	76,725,222	34.37
1869	26,499,729	15.37	62,443,316	24.36
1870	12,726,341	11.29	22,565,299	37.52
1871	22,274,378	13.27	92,363,060	36.67
1872	18,027,664	11.22	103,023,234	40.29
1873	21,974,325	12.61	24,049,322	35.07
1874	26,296,818	14.51	101,815,491	39.75
1875	17,267,967	9.22	97,225,024	34.08
1876	15,354,269	10.12	112,552,642	36.27
1877	27,306,566	15.63	101,224,305	32.48
1878	35,212,783	16.28	114,239,127	37.72

SUMMARY.

The total number of bushels of wheat produced in Ohio in 1878 exceeds the production of any previous year, and the average number of bushels to the acre is greater than in any year since 1850

The total number of bushels of corn also exceeds the production of any previous year, and the average number of bushels of corn to the acre is greater than in any year since 1874.

ADJUTIVE TABLE, EXHIBITING THE NUMBER OF BUSHELS OF OATS AND BUCKWHEAT PRODUCED ANNUALLY, FROM 1857-8, TO 1878, INCLUSIVE.

		Average number bushels of buckwheat to acre.
	.....	11.11
		20.22
		11.43
		10.66
		8.56
		9.80
		13.58
		24.74
		12.42
		10.19
		10.07
		7.70
		11.77
		11.66
		7.65
		10.14
		12.04
		12.
		8.37
		10.15
		10.24

COMPARATIVE TABLE, SHOWING THE NUMBER OF BUSHELS OF RYE AND BARLEY PRODUCED ANNUALLY, FROM 1859 TO 1878 INCLUSIVE.

Years.	Rye—total number of bushels.	Average number of bushels rye to acre.	Barley—total number of bushels.	Average number of bushels barley to acre.
1859.....	576,274	.....	.....	.....
1860.....	1,078,764	11.40	1,548,477	21.
1861.....	779,829	11.22	1,255,049	21.
1862.....	823,291	14.34	1,222,041	22.
1863.....	305,969	9.43	1,329,251	18.
1864.....	503,316	10.30	2,337,213	21.25
1865.....	910,518	10.43	2,419,900	17.
1866.....	622,333	7.98	1,353,955	14.
1867.....	1,025,291	9.44	1,604,179	19.
1868.....	815,666	9.30	815,778	20.38
1869.....	852,722	11.28	1,689,416	23.18
1870.....	331,196	9.43	1,502,007	19.
1871.....	428,014	11.50	1,941,240	23.89
1872.....	295,843	11.75	1,528,266	21.08
1873.....	291,829	10.45	1,074,906	21.55
1874.....	231,435	9.94	1,233,914	26.65
1875.....	415,666	11.31	505,513	12.37
1876.....	442,238	9.35	967,313	19.53
1877.....	914,106	12.21	1,629,817	29.02
1878.....	756,502	13.03	1,265,299	32.89

TIMOTHY AND CLOVER PRODUCED IN OHIO IN 1878.

Counties.	Timothy.		Clover.			
	Acres.	Tons hay.	Acres.	Tons hay.	Bushels seed.	Acres plowed under for manure.
.....	10,151	9,616	1,853	685	1,609	164
.....	11,398	21,322	5,050	4,421	2,211	434
d	24,523	30,313	7,325	6,668	4,414	509
cula	46,377	54,396	361	575	33	59
.....	18,343	22,078	367	255	21	24
ze	9,901	11,673	3,332	3,822	1,975	411
at	28,262	32,802	1,576	1,604	464	62
.....	13,979	12,161	3,113	741	49	391
.....	8,032	10,166	13,857	3,225	1,454	3,659
.....	25,088	23,309	3,709	4,034	3,550	7
aign	11,882	12,417	4,638	4,491	3,458	694
.....	11,779	16,009	8,717	4,622	3,340	2,097
out	16,522	14,651	5,399	994	124	1,439
n	9,278	11,400	1,347	1,161	647	519
biana	34,751	46,370	6,462	8,287	5,054	100
ton	20,507	23,774	3,469	3,129	2,621	144
ord	16,746	23,722	10,029	13,387	6,146	386
oga	34,235	41,411	105	159	9	8
.....	9,723	12,161	13,321	7,341	3,288	3,618
ce	12,835	17,183	3,539	3,482	4,504	484
are	25,471	33,315	3,028	3,976	2,934	467
.....	9,352	12,999	3,640	3,790	2,607	1,010
ld	12,999	18,440	5,757	5,657	7,454	261
e	7,590	10,182	1,365	240	147	73
in	15,343	20,839	3,350	2,558	801	1,416
.....	16,673	21,161	3,325	3,715	3,668	229
.....	11,928	10,053	673	410	90	207
a	31,594	37,516	365	508	7	51
.....	9,325	13,930	8,569	4,111	1,581	2,517
ey	24,110	34,503	1,051	996	441	6
ton	12,330	16,514	3,813	3,793	99	533
ck	17,172	24,508	6,075	7,061	5,111	537
.....	13,138	17,670	3,490	4,256	1,894	378
on	27,357	31,546	667	874	497	22
.....	7,767	10,006	2,200	2,723	2,460	168
nd	15,236	15,950	839	590	853	30
ng	11,818	12,683	892	817	520	38
is	13,799	18,050	9,547	11,673	7,598	267
.....	31,693	38,649	6,193	6,147	4,011	344
on	13,582	12,848	199	38	23	23
on	23,954	30,348	1,473	1,371	3,110	35
.....	22,753	27,914	5,174	5,511	3,744	239
.....	14,047	17,240	843	1,266	425	233
nce	6,100	5,742	1,618	405	33	245
ig	30,865	42,655	3,145	2,593	1,580	76
.....	13,200	16,814	5,702	5,756	3,519	232
.....	40,462	49,720	1,427	1,670	1,654	63
.....	11,704	16,841	2,177	2,647	2,233	428
on	14,167	19,970	415	257	48	115
ing	31,971	42,153	5,130	6,653	5,415	446
n	15,929	20,772	5,329	6,563	3,611	243
a	33,991	41,657	3,272	3,715	2,517	443
.....	13,528	14,928	873	455	51	437
r	10,510	13,357	4,317	4,560	2,671	471
.....	7,196	9,110	10,440	5,607	2,009	3,178

TIMOTHY AND CLOVER—Continued.

Counties.	Timothy.		Clover.			
	Acres.	Tons hay.	Acres.	Tons hay.	bushels seed.	Acres plowed under for manure.
Monroe.....	19,004	17,609	1,069	842	576	17
Montgomery.....	10,427	12,536	17,602	11,312	2,247	4,604
Morgan.....	16,524	19,811	1,459	1,451	1,075	149
Morrow.....	25,033	35,975	2,513	3,145	1,607	48
Muskingum.....	32,259	38,022	2,773	2,407	963	89
Noble.....	16,105	19,510	389	321	94	.....
Ottawa.....	7,953	11,488	1,221	1,803	1,110	212
Paulding.....	5,740	7,192	786	807	729	105
Perry.....	17,867	20,622	1,184	1,044	1,146	24
Pickaway.....	11,895	10,725	4,696	2,595	2,039	432
Pike.....	6,300	5,553	1,071	208	29	121
Portage.....	36,124	44,670	2,808	3,798	2,136	415
Preble.....	7,829	7,777	15,949	4,073	2,436	2,452
Putnam.....	14,174	15,057	3,203	3,821	3,489	420
Richland.....	22,515	28,041	13,206	11,133	5,981	739
Ross.....	11,319	8,146	4,796	1,180	970	732
Sandusky.....	11,325	13,921	8,198	1,018	3,485	680
Scioto.....	8,665	7,629	539	288	9	165
Seneca.....	20,460	22,954	13,570	14,618	6,552	2,175
Shelby.....	8,070	9,014	5,318	4,027	2,953	667
Stark.....	28,936	42,216	13,147	18,538	6,252	1,497
Summit.....	22,788	31,911	4,882	6,910	2,158	968
Trumbull.....	56,602	69,170	977	1,278	577	74
Tuscarawas.....	25,349	32,832	10,716	11,451	8,741	475
Union.....	17,970	25,104	2,269	2,921	869	203
Van Wert.....	10,684	13,762	2,528	2,385	773	248
Vinton.....	10,347	9,788	265	141	35	1
Warren.....	10,584	12,120	6,364	1,416	285	2,129
Washington.....	23,332	25,417	1,874	1,540	291	278
Wayne.....	24,015	36,513	14,631	20,722	8,640	763
Williams.....	16,065	19,785	4,956	4,344	4,722	259
Wood.....	14,791	20,485	4,072	4,704	3,700	373
Wyandot.....	14,751	19,196	4,843	5,466	3,447	460
Totals.....	1,586,778	1,951,488	388,219	338,985	199,581	53,021

COMPARATIVE TABLE OF TIMOTHY AND CLOVER.

Year.	Timothy.			Clover.				
	Number of acres.	Tons of hay.	Average yield per acre.	Number of acres.	Tons of hay.	Bushels of seed.	Average yield of clover hay per acre.	No. of acres plowed under.
.....	1,357,874	1,806,461	1.33	.....	.....	.....	.....	.....
.....	1,340,672	1,366,055	1.02	.....	.....	.....	.....	.....
.....	1,538,562	2,027,160	1.33	.....	.....	.....	.....	.....
.....	1,461,418	1,708,201	1.16	.....	.....	.....	.....	.....
.....	1,570,252	2,067,280	1.32	.....	.....	.....	.....	.....
.....	1,195,560	1,095,489	.90	403,884	301,475	151,606	.74	.....
.....	1,252,471	1,204,921	.95	346,457	269,070	105,837	.77	27,398
.....	1,420,191	1,852,303	1.32	390,991	359,856	217,391	.92	33,675
.....	1,410,081	1,639,504	1.30	251,941	159,671	62,200	.61	30,199
.....	1,586,704	1,993,405	1.25	313,520	286,837	147,846	.91	26,811
.....	1,532,342	1,743,537	1.13	942,391	254,895	47,635	.27	32,689
.....	1,488,581	1,784,947	1.19	401,629	360,268	98,570	.89	36,648
.....	1,390,522	1,554,622	1.11	340,440	401,398	367,069	1.17	34,692
.....	1,377,876	1,526,806	1.10	450,009	401,415	384,974	.89	46,998
.....	1,322,387	1,270,779	.96	549,557	493,171	308,903	.89	51,552
.....	1,315,157	1,302,164	.99	651,158	568,043	205,944	.87	64,089
.....	1,310,837	1,145,999	.83	502,268	362,886	194,066	.72	40,277
.....	1,434,174	1,477,966	1.03	222,743	249,726	66,057	1.12	28,965
.....	1,541,015	1,799,908	1.16	467,599	447,417	157,459	.91	46,617
.....	1,739,813	2,160,334	1.24	334,877	286,265	251,934	.85	44,891
.....	1,586,778	1,951,488	1.22	388,219	338,985	199,581	.87	53,021

FLAX AND POTATOES PRODUCED IN OHIO IN 1878.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

FLAX AND POTATOES PRODUCED IN OHIO IN 1878—Continued.

✓

✗

* Not reported.

COMPARATIVE TABLE, SHOWING THE ACREAGE AND ANNUAL PRODUCTION OF POTATOES IN OHIO, FROM 1860 TO 1878, INCLUSIVE.

Year.	Acres	Bushels.	Average number of bushels per acre (fractions omitted).
1860	96,254	9,365,386	98.
1861	80,949	6,556,901	80.
1862	75,367	5,169,327	70.
1863	80,785	5,297,408	66.
1864	81,972	6,811,055	83.
1865	70,515	4,827,354	68.
1866	94,226	6,725,577	71.
1867	87,149	5,744,530	65.
1868	103,287	7,449,247	72.
1869	118,862	10,274,605	86.
1870	87,787	6,121,590	69.
1871	100,630	8,755,193	87.
1872	105,896	7,832,297	73.
1873	78,199	5,966,316	76.
1874	107,911	7,384,907	68.
1875	142,397	13,907,894	97.
1876	116,957	7,066,097	60.
1877	127,685	10,504,278	82.
1878	116,513	7,580,118	65.

TOBACCO PRODUCED IN 1878.

Counties.	Tobacco.	
	Acres. planted.	Pounds produced.
.....	400	289,381
.....	17	1,243
la	4	7,025
.....	134	129,035
.....	15	5,335
.....	1,769	1,913,411
.....	3,033	2,490,551
.....	353	76,113
gn	14	3,785
.....	65	72,038
t	2,097	1,262,098
.....	19	16,127
ana	1	225
on	2	2,190
l	3	630
a	1	565
.....	1,099	1,250,777
.....	81	66,805
o	11	1,779
.....	1	125
.....	8	1,604
.....	3	615
.....	4	395
.....	114	75,440
.....	7	1,193
.....	419	568,557
.....	951	798,828
l	3	680
.....	1	315
.....	2	1,650
.....	56	17,492
.....	8	6,206
l	46	33,757
.....	15	11,050
.....	5	1,742
.....	4	1,410
.....	2	400
.....	8	3,393
.....	22	16,400
o	125	91,790
.....	2	1,970
.....	5	3,475
.....	15	4,365
.....	2	965
.....	2	2,168
g	1	40
.....	1	75
.....	29	36,510
.....	5	3,325
.....	7	3,035
.....	329	333,769
.....	3,050	2,794,895
ery	7,144	8,112,110
.....	831	711,833

TOBACCO PRODUCED IN 1878—Continued.

Counties.	Tobacco.	
	Acres planted.	Pounds produced.
Morrow	2	325
Muskingum	8	3,216
Noble	9,469	2,500,750
Ottawa	3	100
Paulding	13	7,751
Perry	43	42,930
Pickaway	11	5,966
Pike	17	6,766
Portage	2	1,949
Preble	1,212	1,253,399
Putnam	8	1,575
Richland	1	400
Ross	11	3,991
Sandusky	1	6,600
Scioto	3	2,016
Seneca	1	1,111
Shelby	40	22,700
Stark	3	2,140
Summit	2	2,300
Trumbull	1	186
Tuscarawas	9	2,220
Union	2	1,230
Van Wert	7	2,296
Vinton	110	104,906
Warren	850	924,152
Washington	1,004	1,355,679
Wayne	69	63,515
Williams	1	430
Wood	1	45
Wyandot	3	2,210
Totals	22,899	23,075,140

COMPARATIVE TABLE SHOWING THE PRODUCTION OF TOBACCO IN OHIO FROM 1863 TO 1878, INCLUSIVE

HORTICULTURAL
STATISTICS.

APPLES, PEACHES, AND PEARS PRODUCED IN 1878—Continued.

Counties.

Lucas
Madison
Mahoning
Marion
Medina
Meigs
Mercer
Miami
Monroe
Montgomery
Morgan
Morrow
Muckingum
Noble
Ottawa
Paulding
Perry
Pickaway
Pike
Portage
Preble
Putnam
Richland
Ross
Sandusky
Scioto
Seneca
Shelby
Stark
Summit
Trumbull
Tuscarawas
Union
Van Wert
Vinton
Warren
Washington
Wayne
Williams
Wood
Wyandot

Totals.....

GRAPES AND WINE PRODUCED IN OHIO—Continued.

reports of "acres in vineyard" are so inaccurate as to be compared.

PEACHES.

The peach crop of 1878 was a light one (1,476,159 bushels), and somewhat generally diffused over the State. The crop of this year (1879) was an entire failure in the central and southern parts of the State, owing to the extreme cold of the past winter, when the mercury went as low as 20° to 22° below zero, causing destruction of the fruit buds and much damage to the trees. In the northern border of the State the cold was not so severe, and the buds escaped injury, so that a fair crop of fruit was realized. Having two good crops in succession in this section of the State, and but few failures in the past six or ten years, of course there is a disposition to plant more peach trees along the lake shore, and but few elsewhere in the State.

PEARS.

The crops of pears have been less variable than those of apples and peaches, and the amount is of course less—that of 1878 was 110,419 bushels. Failures are not apt to occur from winter-killing of the buds, but the trees are often injured by cold so as to cause them to die of blight the next summer. There is also the so-called “fire-blight,” which kills many pear trees and discourages planting, so that there has been no considerable increase of this fruit in the State. Much of the crop of this season was lost in consequence of the warm autumn causing the late varieties to ripen too early, and to decay before they could be marketed. Many of the winter apples were also lost, or had to be sold at low prices, owing to the same difficulty.

CHERRIES.

The varieties of sweet cherries have not generally done well for some years past, owing to injury to the trees by the winters, or the tendency of the fruit to rot at the time of ripening; hence these are but little grown for the markets. The Morello or sour cherries are more hardy and reliable, and some of these, as the Early May variety, are largely grown in southern parts of the State, the fruit being shipped extensively. Some planting of this variety has also been done of late in northern localities, both for market and home use. We have no statistics of cherries or plums.

PLUMS

Blue Damsons are largely grown in the vicinity of Cincinnati, also on the hilly lands in Ross county, and shipped to distant markets. The trees are very hardy, and the crops reliable; but the finer kinds of plums, such as the Lombards and gages, have not been generally suc-

1

**METEOROLOGY,
CLIMATOLOGY, AND ELEVATIONS.**

22	2	4	2
		2	
	2	2	
22		2	
		2	
			2

The greatest monthly velocity was 5.149 miles, December.

The least monthly velocity was 3.374 miles, August.

The greatest daily velocity was 327 miles, April.

The least daily velocity was 48 miles, July.

The maximum hourly velocity was 25 miles.

BAROMETRICAL OBSERVATIONS.

Barometer corrected for temperature and elevation above sea level (690.422 feet).

Mean barometer was 30.063.

Highest barometer was 30.660, February 27th.

Lowest barometer was 29.342, November 27th.

Annual range of barometer was 1.318.

Highest monthly pressure was 30.191, January

Least monthly pressure was 29.963, July.

Greatest monthly range was 1.213, December.

Least monthly range was .565, July.

Average monthly range was .878

—T—E—M—P—E—R—A—T—U—R—E—

1881

* Barometer corrected for temperature, elevation and instrumental error. Elevation of barometer above sea-level, 690.423 feet. Range of barometer during year, 1.318 inches.
Self-registering instruments.

And the number of times the wind blew from each point of the compass, the winds most and least likely to be followed by precipitation, together with the highest and lowest stages of the Ohio River at Cincinnati, for the commercial year ending August 31, 1879:

1879

1879

1879

1879

1879

† Prevailing direction of wind, southeast.

* Observations of river taken daily at three P. M. Range of river during year, 37 feet, 9 inches.

RULES OF TRIANGULATIONS FOR DIP, BEGINNING AT THE OHIO RIVER NEAR PORTSMOUTH, THENCE NORTHERLY AND EASTERLY TO THE PENNSYLVANIA LINE.

Locality.	Geological stratum	Direction of greatest inclination.	Rate per mile in feet.
Scioto Co	Logan sandstone.....	South 57° east ...	40
Lawrence Co	Coal seam	" 60° " ...	20
Ross Co.....	Waverly	" 83° " ...	32
Pomeroy	Coal seam	" 80° " ...	29
Gallia Co	"	" 73° " ...	27
Columbus.....	Cliff limestone.....	" 81° " ...	22
Haydenville	Nelsonville coal.....	" 79° " ...	36
Straitsville	"	" 78° " ...	32
Shawnee Run	"	" 77° " ...	25
Sunday Creek.....	"	" 74° " ...	32
Moxahala	"	" 62° " ...	30
New Lexington	"	" 60° " ...	30
Tunnel	"	" 67° " ...	24
Jonathan's Creek	"	" 66° " ...	21½
Zanesville	Limestone (local), Putnam Hill	" 87° " ...	48
Coshocton Co	Coal seam No. 6.....	" 26° " ...	22
Crawford Co	Waverly	" 59° " ...	5½
Valley of Mohican	Coal No. 1.....	" 53° " ...	2½
New Philadelphia	Limestone (local)	" 86° " ...	10
Bolivar	"	" 72° " ...	25
Wayne Co	Coal No. 6	" 32° " ...	16
Massillon	Coal No. 1 (local)	" 71° " ...	15½
Stark Co.....	"	" 23° " ...	9
Sandy Valley	Coal No. 5 N.....	" 43° " ...	36
Summit Co	Coal No. 1	" 53° " ...	8½
Cuyahoga Co	Berea grit	" 8° west ..	11
Lorain Co.....	"	" 34° " ...	9
Geauga and Trumbull	Conglomerate.....	" 37° east ...	5½
Portage and Trumbull.....	Coal No. 1.....	" 12° " ...	20
Conotton Valley	" 6 (local).....	North 80° " ...	14½
Mineral Point	" 6	South 32° " ...	16½
Mahoning Valley.....	" 1	" 22° " ...	14
Mineral Ridge.....	" 1 (local).....	" 18° " ...	16½
Lowell	" 1 "	" 3° " ...	13
Rochester, Columbiana Co..	" 6 "	" 10° " ...	30
Hanover, Columbiana Co ..	Limestone	" 20° " ...	16
Salineville, Columbiana Co.	Coal seams (local).....	North 70° to " 82° " ...	80 to 100
Hammond's Station, Col. Co.	Coal seams (local).....	South 50° " ...	57
Stouboenville	Pittsburg seam	" 37° " ...	23
Wheeling	"	" 45° " ...	53

ELEVATIONS IN OHIO—Continued.

Counties.	Localities, etc.	Height above Lake Erie.	Height above ocean.
Ashtabula	Ashtabula <i>h</i>	75	650
	Conneaut <i>h</i>	78	653
	“ <i>w</i>	120	695
	State line <i>h</i>	79	654
	Kingsville <i>w</i>	152	727
Athens	Athens <i>d f</i>	81	656
	Nelsonville <i>d</i>	108	683
	Salina <i>d</i>	84	659
	Pitchers grade <i>f</i>	301	876
	Warren <i>f</i>	98	673
	Big Run <i>f</i>	71	646
Auglaize	Wapakoneta <i>l</i>	318	893
	St. Mary's, canal level	291	866
Belmont	St. Clairsville (Kinney)		
	Main street crossing railroad	595	1170
	Bellaire <i>gg</i>	82	657
Butler	Hamilton <i>l</i>	29	604
	Canal basin	37	612
Carroll	Malvern <i>gg</i>	426	1001
	Oneida <i>gg</i>	436	1011
Champaign	Urbana (<i>a</i> 454) <i>k</i>	458	1033
	Summit, near Mechanicsburg <i>W</i>	543	1118
	Summit, n. w. part of county <i>W</i>	583	1158
Clarke	Springfield (<i>a</i> 335) <i>W</i>	378	953
Clermont	Summit, near Bethel, <i>O</i> (about)	347	922
	Loveland <i>f</i>	21	596
Clinton	Wilmington <i>O</i>	417	992
	Martinsville <i>f</i>	470	1045
	Blanchester <i>f</i>	404	979
	New Vienna <i>f</i>	557	1132
	Railroad summit near Vienna <i>O</i>	594	1169
Columbiana	New Lisbon <i>n</i>	393	968
	Salem <i>b</i>	620	1195
	Wellsville <i>g</i>	115	690
	Liverpool <i>g</i>	120	695
	Columbiana <i>b</i>	555	1130
	Wellsville, level of river <i>W</i>	76	651
	Wellsville bluffs <i>W</i>	530	1105
	Round Knob <i>n</i>	844	1419
	Mahoning summit <i>n</i>	627	1202
	Yellow creek summit <i>g</i>	543	1118
	Salineville <i>g</i>	306	881
	Bayard <i>g</i>	503	1078
	Yellow creek hills <i>W</i>	681	1256
	Hanoverton (high land) <i>W</i>	624	1199

ELEVATIONS IN OHIO.—Continued.

Counties.	Localities, etc.	Height above Lake Erie.	Height above ocean.
Coshocton	Coshocton (<i>W</i> 208) <i>i</i>	198	773
	“ low water Tuscarawas river <i>W</i>	168	743
	Oxford <i>i</i>	220	795
	Near New Castle <i>W</i>	751	1326
	Conesville <i>i</i>	165	740
Crawford	Bucyrus <i>a</i>	434	1009
	Galion <i>a</i>	596	1171
	Crestline (<i>b</i> 594) <i>c</i>	601	1176
	East line Sandusky township <i>W</i>	384	959
Cuyahoga	Cleveland union depot <i>c</i>	24	599
	“ monument square <i>W</i>	89	664
	“ corner Kinsman and Erie streets <i>W</i> ..	103	678
	“ Wilson avenue <i>W</i>	128	703
	Newburg (<i>g</i> 224, <i>a</i> 240) <i>W</i>	227	802
	Bedford (<i>g</i> 369) <i>W</i>	379	954
	Solon <i>a</i>	457	1032
Darke	Greenville <i>W</i>	480	1055
	Union City <i>cc</i>	532	1107
Defiance	Defiance <i>c</i>	125	700
	“ canal level, lock 2	105	680
	“ “ “ 1	96	671
	Old Fort <i>W</i> .....	.....	98
Delaware	Delaware <i>c</i>	378	953
	Ashley <i>c</i>	412	967
	Lewis Center <i>c</i>	387	962
Erie	Sandusky <i>k</i>	25	600
	Bloomington deep cut <i>W</i>	160	735
Fairfield	Lancaster <i>d</i>	253	828
	Carroll	240	815
	“ junction of Ohio and Hocking canals...	274	849
Fayette	Washington C. H <i>O</i>	382	957
Franklin	Columbus union depot <i>c</i>	171	746
	“ south “ <i>d</i>	144	719
	“ old capitol square	198	773
	“ floor of rotunda of capital <i>W</i>	210	785
	“ canal level <i>W</i>	128	703
	Worthington <i>c</i>	340	915
	Dublin <i>W</i>	266	841
	Westerville <i>O</i>	356	931
	Ohio State University <i>O</i>	193	764
Fulton	Wauseon <i>h</i>	200	775
	Delta <i>h</i>	149	724
	Archb'd <i>O</i>	165	730
Gallia	Gallipolis, see river level .....	.....	.....
Geauga	Summit Cuyahoga and Chagrin rivers <i>W</i>	627	1202

ELEVATIONS IN OHIO.—Continued.

Counties.	Localities, etc.	Height above Lake Erie.	Height above sea.
.....	Xenia <i>W</i>	519	1094
.....	Yellow Springs <i>W</i>	398	971
.....	Cincinnati, Ohio river, low water below Lake Erie, <i>W</i> 134.....	.....	441
.....	Cin. upper level of canal below Lake Erie, <i>W</i> 21.....	.....	554
.....	Cincinnati, C. H. & D. R. R. track, 68 c.....	.....	507
.....	Blanchard's Fork summit <i>W</i>	489	1064
.....	Kenton <i>k</i>	442	1017
.....	Forest <i>b</i>	365	940
.....	Summit, northeast, between Scioto and Aug- laize rivers <i>W</i>	796	1371
.....	Cadiz Junction <i>i</i>	518	1093
.....	Millers <i>i</i>	432	1007
.....	Tunnel No. 4 <i>i</i>	505	1180
.....	Fairview <i>i</i>	490	1011
.....	New Market <i>i</i>	356	961
.....	Tunnel No. 5 <i>i</i>	480	1055
.....	Napoleon <i>e</i>	107	682
.....	Liberty <i>e</i>	109	684
.....	Alma <i>i</i>	137	712
.....	<i>W</i>	560	1135
.....	Logan (150 <i>O</i>) <i>d</i>	105	730
.....	Haydenville <i>d</i>	110	731
.....	Millersburg <i>W</i>	243	818
.....	Top of hills near Millersburg <i>W</i>	660	1235
.....	Holmesville <i>W</i>	290	865
.....	Summit, between Kilbuck and Mohican, south west part county <i>W</i>	585	1160
.....	Norwalk <i>k</i>	155	730
.....	Monroeville <i>k</i>	161	736
.....	New London <i>e</i>	491	996
.....	Greenwich <i>e</i>	475	1050
.....	Bellevue (<i>k</i> 156) <i>k</i>	191	766
.....	Jackson <i>W</i>	220	785
.....	Lick township <i>W</i>	191	771
.....	Steubenville <i>gg</i>	90	665
.....	" Washington street <i>i</i>	155	730
.....	" river level, low water.....	.....	.....
.....	Hammondsville <i>g</i>	115	690
.....	Mingo Station <i>i</i>	94	719
.....	Tunnel No. 1 <i>i</i>	200	836
.....	Smithfield <i>i</i>	200	775
.....	Tunnel No. 2 <i>i</i>	370	945
.....	" 3 <i>i</i>	490	1065

ELEVATIONS IN OHIO.—Continued.

Counties.	Localities, etc.	Height above Lake Erie.	Height above the Ocean.
Montgomery	Dayton (<i>t</i> 180) <i>a</i>	179	754
	" canal level <i>W</i>	178	753
	" " and D. M. R. R. crossing <i>i</i> ..	165	741
	River level seven miles north of Dayton <i>W</i>	315	890
Morrow	Gilead Station <i>e</i>	466	1041
	" " " " " " " " " " " "	437	1012
	" " " " " " " " " " " "	573	1148
Mockingum	" " depot <i>W</i>	136	711
	" river level <i>W</i>	121	696
	Putnam <i>W</i>	150	725
	" " " " " " " " " " " "	128	703
	" " " " " " " " " " " "	162	737
	Norwich <i>W</i>	547	1122
	Mt. Sterling <i>W</i>	586	1161
	Frazysburg <i>i</i>	178	753
Noble	Caldwell (J. S. Kingsberry)	266	841
Ottawa	Genoa <i>O</i>	65	640
Paulding	Antwerp <i>e</i>	157	732
Perry	" " " " " " " " " " " "	296	871
	" " " " " " " " " " " "	584	1159
	" depot <i>W</i>	221	796
	" Gap, Shawnee <i>W</i>	114	909
	Bristol Tunnel, R. R. grade <i>W</i>	390	965
	" " top of hill <i>W</i>	502	1077
Pickaway	Circleville	5	580
Pike	Piketon <i>O</i>	■	578
	Fort Hill <i>O</i>	710	1285
Portage	Ravenna court house (<i>g</i> 260) <i>W</i>	565	1140
	" C. & P. R. R. depot <i>g</i>	530	1105
	" A. & G. W. R. R. depot <i>a</i>	520	1095
	" canal level <i>W</i>	501	1076
	Kent <i>a</i>	474	1049
	Mantua summit <i>W</i>	575	1150
	" R. R. depot <i>ae</i>	536	1111
	Atwater summit <i>g</i>	503	1178
	" R. R. depot <i>g</i>	560	1135
	" summit (north) <i>N</i>	525	1260
Preble	Eaton <i>O</i>	469	1044
	Camden <i>O</i>	264	839
	Sonora <i>O</i>	401	976
Putnam	Ottawa <i>i</i>	155	730
	Columbus Grove <i>i</i>	194	769
Richland	Mansfield <i>a</i>	581	1156
	" <i>b</i>	592	1167
	Shelby <i>e</i>	■	1119
	Summit (south-east part of county) <i>W</i>	925	1400

ELEVATIONS IN OHIO—Continued.

Counties.	Location, etc.	Height above Lake Erie.	Height above the ocean.
Richland	Ontario (west part of county) <i>a</i>	802	1377
	Spring Mills <i>b</i>	639	1214
	Richland Village (north part of county) <i>W</i>	498	1073
Ross	Chillicothe, canal level <i>W</i>	65	640
	Chillicothe, railroad depot <i>f</i>	62	637
	Head of Paint creek <i>W</i>	250	835
	Londonderry <i>f</i>	52	627
	Salt creek <i>f</i>	42	617
Sandusky	Fremont <i>h</i>	62	637
	Clyde <i>h</i>	127	702
Scioto	Portsmouth, below Lake Erie <i>W</i> , river level low water, ± 6		459
	Morses' mill <i>W</i> , below Lake Erie, 47		523
Seneca	Tiffin <i>k</i>	183	758
Shelby	Sidney <i>cc</i>	383	958
	" <i>l</i>	423	1003
	Near Sidney, canal level	376	951
	Railroad summit <i>l</i>	489	1055
	Anna <i>l</i>	445	1020
	Laramie summit <i>W</i>	378	953
Stark	Canton <i>b</i>	474	1049
	Massillon <i>b</i>	392	967
	" canal level <i>W</i>	366	941
	Alliance (<i>g</i> 516, <i>W</i> 501) <i>b</i>	524	1093
	Summit, south of Alliance <i>W</i>	627	1202
	Wilmot (top of hill) <i>W</i>	686	1261
Summit	Akron <i>a</i>	430	1005
	Tallmadge <i>a</i>	527	1102
	Hudson Station <i>g</i>	480	1055
	" Village <i>W g</i>	547	1122
	Summit near Akron <i>W</i>	600	1175
	" west of Akron <i>W</i>	506	1081
	" lake <i>W</i>	400	975
	" level Ohio Canal <i>W</i>	395	970
Trumbull	Warren <i>a</i>	327	902
	" <i>W</i>	332	907
	Levittsburg <i>a</i>	322	897
	Orangeville, State line <i>a</i>	370	945
	Brookfield (summit of hill) <i>W</i>	590	1165
	Newton Falls <i>W</i>	333	908
	Champion, Mahoning and Grand rivers <i>W</i>	343	918
Tuscarawas	New Philadelphia <i>W</i> 227, <i>gg</i>	331	906
	" canal level <i>N</i>	287	862
	Canal Dover <i>gg</i>	307	882
	Dennison <i>i</i>	282	857
	Urichsville <i>N</i> 230, <i>W</i> 291 <i>i</i>	290	865
	" top of hill <i>N</i>	580	1155
	New Comerstown <i>i</i>	223	798
	Mt. Tabor <i>N</i>	775	1350
	Hill tops north of Port Washington <i>N</i>	725	1300

ELEVATIONS IN OHIO—Continued.

Counties.	Localities, etc.	Height above Lake Erie.	Height above ocean.
Tuscarawas.....	Hill top near Zoar Station (<i>N</i> 600) <i>W</i>	648	1223
	Zoar Station (<i>N</i> 314) <i>W</i>	316	1491
	Agnes hill <i>W</i>	708	1283
	Rowville, top of hill <i>W</i>	740	1315
Union	Richwood <i>O</i>	369	944
Van Wert	Van Wert <i>b</i>	213	788
Vinton	Zaleski <i>f</i>	148	723
	Raysville <i>f</i>	63	638
	Hamden <i>f</i>	148	723
	Vinton Furnace <i>f</i>	138	713
Warren	Lebanon <i>O</i>	165	740
	Morrow <i>O</i>	67	642
Washington	Marietta, river level low water <i>W</i> , below Lake Erie, 2 .....	.....	573
	Harmar <i>f</i>	50	625
	Vincent <i>f</i>	201	776
	Little Hocking <i>f</i>	182	757
	Cutler <i>f</i>	204	779
Wayne	Wooster <i>b</i>	342	917
	" summit <i>b</i>	563	1138
	Orrville <i>W</i> 489 <i>b</i>	499	1074
	Summit, north-west part of county <i>W</i>	700	1275
	Killbuck at mouth Apple creek <i>W</i>	278	853
Williams	Bryan <i>h</i>	198	753
	Stryker <i>h</i>	146	721
	Summit <i>h</i>	304	879
	Edgerton <i>h</i>	270	845
Wood	Milton <i>l</i>	117	692
	Perrysburg <i>l</i>	64	639
Wyandot	Upper Sandusky <i>b</i>	287	862
	Carey <i>s</i>	245	820

NOTE.—This table is expected to be only an introduction to more complete tables of elevations in future reports. In its preparation it was found that "authorities" differed in many instances, hence, although impossible to be exact in all cases, yet the greatest difference being but a few feet, the value of the table is not materially affected thereby.

COMPARATIVE TABLE SHOWING THE PRINCIPAL ELEVATIONS OF 1000 FEET AND UPWARDS IN OHIO, ABOVE TIDE WATER, COMPARED WITH ELEVATIONS IN OTHER STATES AND TERRITORIES.*

Counties.	Locality.	Elevation above ocean—feet.
OHIO.		
Ashland	Polk	1949
Belmont	St. Clairsville	1170
Carroll	Malvern	1001
“	Oneida	1011
Champaign	Urbana	1033
“	Summit in Champaign county	1158
Clinton	Martinsville	1096
Columbiana	Salem	1196
“	Round Knob	1419
“	Yellow Creek Hills	1256
“	Mahoning summit	1202
Coshocton	Near Newcastle	1326
Crawford	Bucyrus	1009
“	Galion	1171
“	Crestline	1176
Cuyahoga	Solon	1032
Darke	Greenville	1055
“	Union City	1107
Geauga	Summit C. and C. rivers	1202
Hardin	“ Blanchard’s Fork	1064
“	Kenton	1017
“	Summit in Hardin county	1371
Harrison	Cadiz Junction	1093
“	Fairview	1011
“	Tunnel N. 4, P. C. & St. L. railroad	1180
Highland	Hillsboro	1135
Holmes	Top of hills near Millersburg	1235
“	Killbuck summit	1160
Huron	Greenwich	1050
Jefferson	Tunnel No. 3, P. C. & St. L. railroad	1065
Knox	Summit of north part of county	1290
“	“ Schenck’s and Six Mile Run	1295
“	“ “ and Ball’s Run	1235
Lake	Little Mountain	1175
Licking	Summit of hills northwest part of county	1316
“	“ “ south part of county	1235
“	National road east of Jacktown	1120
“	Jacktown	1075
Logan	Bellefontaine	1118
“	Summit of Great Miami and Scioto rivers	1361
“	Slate hill near Bellefontaine	1550
Mahoning	Canfield	1187
“	Summit Harper’s Run	1208
Medina	Wadsworth	1117
Morrow	Iberia	1148
“	Gilead Station	1041
“	Cardington	1012

* The elevations in other States and Territories are from the U. S. Geological Survey, as collated by Henry Gannet, M. E.

COMPARATIVE ELEVATIONS.—Continued.

Counties.	Locality.	Elevation above ocean—feet.
	OHIO.	
Muskingum	Norwich	1122
“	Mt. Sterling	1161
Perry	Somerset	1159
“	Top of hill, Bristol tunnel	1077
Pike	Fort hill	1285
Portage	Ravenna	1140
“	Topographical summit	1260
“	Mantua	1150
“	Atwater	1178
Preble	Eaton	1044
Richland	Mansfield	1167
“	Shelby	1119
“	Spring Mills	1214
“	Ontario, west part of county	1377
“	Summit, southeast part of county	1400
Shelby	Sidney	1003
“	“ railroad summit	1058
“	Anna	1020
Stark	Canton	1049
“	Alliance	1099
“	Summit south of Alliance	1202
“	Wilmot, top of hill	1261
Summit	Akron	1005
“	Summit near Akron	1175
“	Hudson	1122
Trumbull	Brookfield, summit of hills	1165
Tuscarawas	Hilltop north of Port Washington	1300
“	“ “ Rowville	1315
“	“ near Uhrichsville	1155
“	Agnus hill	1283
“	Zoar Station	1491
Wayne	Wooster summit	1138
“	Orrville	1074
“	Summit northwest part of county	1275

COMPARATIVE NOTE.

Lake Erie (above tide water)	575
Cincinnati (above tide water)	441
Wheeling, West Virginia (above tide water)	625
Pittsburgh, Pennsylvania (above tide water)	747
“ river level, low water (above tide water)	715

COMPARATIVE ELEVATIONS—Continued.

Locality.	Feet.	Locality.	Feet.
ARKANSAS.		DAKOTA.	
Camden	123	Bois des Sioux	1039
Little Rock	309	Fort Buford	2017
Fayetteville	1350		
MISSOURI.		NEW MEXICO.	
St. Louis (R.R)	428	Fort Fillmore	3937
St. Joseph	820	San Antonio	6400
Independence	1035	Sante Fé	7047
Darley	1627	Fort Taos	8000
IOWA.		ARIZONA.	
Davenport (R.R)	570	Aubrey City	398
Iowa City	626	Fort Mojave	604
Sibley	1485	Big Canon	1486
Vaneter's Grove	1500	Tubac	3000
MINNESOTA.		Fort Buchanan	5330
St. Paul (R.R)	696	Fort Canby	6500
St. Anthony	829	Leroux Spring	7373
Fort Ridgely	1230		
St. Olaff	1335	MONTANA.	
Hospers	1438	Bighorn City	2831
TEXAS.		Fort Benton	2780
Fort Polk	15	Montana City	4191
Indianola	25	Virginia City	5824
Houston	50	Fort Shaw	6000
Austin	200		
San Antonio	600	COLORADO.	
Pecos Spring	3098	Las Animas (R.R)	3967
Fort Stockton	4910	Canon City	5494
INDIAN TERRITORY.		Colorado City	6342
Fort Towson	300	Hot Springs	7725
Fort Washita	645	Breckenridge	9492
Fort Arbuckle	1000	Ore City	10,528
		Alma	10,863
KANSAS.		Montgomery	11,005
Parsons	366		
Lawrence (R R)	846	WYOMING.	
Topeka (R.R)	904	Boleter	4325
Fort Scott	1006	Cheyenne	6075
Fort Wallace	3203	Deer Creek Agency	5000
Cheyenne Wells	4179	Fort Halleck	7500
Wild Horse	4340	Sherman	8271
NEBRASKA.			
Falls City	806	IDAHO.	
Omaha (R.R)	1060	Lapway	2000
Nebraska City	1005	Salmon City	4030
Lincoln	1154	Fort Hall	4754
Pine Bluff	5064	Soda Springs	5738
		Florence	5000

COMPARATIVE ELEVATIONS—Continued.

Locality.	Feet.	Locality.	Feet.
UTAH.		WASHINGTON TERRITORY.	
Bonneville (R.R).....	4310	Vancouver.....	00
Salt Lake City.....	4320	Fort Vancouver.....	50
Weber (R.R).....	5096	" Townsend.....	135
St. Mary's.....	6200	" Walla Walla.....	1396
Evanston (R.R).....	6870	Cantonment Stevens.....	3412
NEVADA.		GEORGIA.	
St. Thomas.....	1600	Mud Creek, Bald Mountain.....	4705
Las Vegas.....	2074	MAINE.	
Indian Springs.....	3402	Lake Sebago.....	270
Reno.....	4525	Moosehead lake.....	1038
Tulasco.....	5418	Mt. Agamenticus.....	673
Virginia City.....	6200	Mt. Katahdin.....	5200
Star.....	7800	MASSACHUSETTS.	
San Juan.....	8075	Lake Quinsigamond.....	361
CALIFORNIA.		Mt. Holyoke.....	1120
San Francisco.....	00	Hoosac Mountain.....	2510
Santa Barbara.....	20	Graylock Mountain.....	3505
San Diego.....	30	NEW HAMPSHIRE.	
Stockton.....	46	Echo Mountain.....	3170
Sacramento.....	82	Carr's ".....	3480
Oakland.....	123	Blue ".....	4370
San Jose.....	114	Mt. Adams.....	5794
Anaheim.....	262	NEW YORK.	
Hooker.....	543	Lake Champaign.....	101
Kingston.....	1118	" Ontario.....	250
Georgetown.....	2433	" Mahopac.....	660
Fork Crook.....	3390	" Henderson.....	1936
Blue Canon.....	4700	Mt. McIntyre.....	5183
Eureka.....	5223	TENNESSEE.	
Clifton.....	6339	Cross Knob.....	5931
Aurora.....	7468	Mt. Collins.....	6188
OREGON.		Mt. Curtis.....	6568
Fort Umpqua.....	8	VERMONT.	
Portland.....	150	Equinox Mountain.....	3872
Oregon City.....	200	Mt. Lincoln.....	4078
Fort Dallas.....	350	Killington Peak.....	4221
" Lane.....	2000		
Auburn.....	3300		
Fort Klemeth.....	4200		

REVIEW

OF THE

GEOLOGY OF EASTERN OHIO.

REVIEW OF CERTAIN POINTS IN THE GEOLOGY OF EASTERN OHIO.

BY PROF. EDWARD -ORTON.
Ohio State University, Columbus, Ohio.

[Prepared for the Annual Report of the Secretary of State.]

The pages of the annual statistical reports of Ohio have been thrown open of late to contributions treating of various phases of our economical geology. Availing myself of this medium, I propose to set forth, in the present paper, a brief summary of a portion of the geological history of the eastern half of Ohio, in which the mineral wealth of the State is chiefly centered. My principal object will be to trace the stratigraphical order of this district; and, in the second place, I wish to note some of the connections between the geological series of Ohio, Pennsylvania, and Kentucky.

The western half of Ohio consists, for the most part, of limestone strata that were formed in the seas of Lower Silurian, Upper Silurian, and Devonian time. The aggregate thickness of these strata is not less than 1,200 feet, and though differences exist among them by which they can be readily separated into five chief divisions, there is still no reason to believe that any marked change occurred in the character of the seas during the protracted periods in which they were growing. The life which these seas contained was slowly changing from age to age, and differences are indicated in the several strata as to the depth of the water in which they were formed, and as to the conditions under which the sedimentary matter that enters into them was supplied, but no real physical break occurs in the long history.

The northern extension of that early fold of the continent which we call the Cincinnati Axis began to invade Ohio in the later ages of Lower Silurian time. It extended itself slowly through the succeeding periods, until at the end of the Upper Silurian, the dry land of Ohio reached as far north as Champaign county and as far east as the Scioto valley. The Corniferous limestone was deposited in the sea that surrounded this broad and low axis. No more genial conditions of growth are shown by any stratum of the Ohio scale than those which this Devonian limestone attests, but with it the great limestones of the State come to an end. The change from the calcareous beds of this series to the next formation is very abrupt and very marked.

The Logan group in Pennsylvania, as well as in Ohio, is still a subject of investigation ; but it seems likely to find its equivalent in the Sharon shales and sandstones of Chance, if not in the Sharon conglomerate. (Report V, page 224). The Shenango sandstone and shales of White hold the same place. They contain, with the usual Waverly fossils, many coal plants, among which "huge lepidodendra" are mentioned. (Report V, page 224). The occurrence of *Lepidodendron Veltheimiamum*, a sub-carboniferous form, in this rock, is also noted. (Report Q Q Q, page 61) The Sharon sandstones are held by Carll to be the First and Second Mountain sands of the oil regions, the lower or main one probably becoming the Garland conglomerate of Venango county.

The equivalences established or highly probable, now stated, can be shown in tabular form :

already settled. The section that I copy is taken from Mr. Chance's report on Northern Butler (Report V. pages 186-7).

Though at least four well developed and largely worked seams of coal are now included in the Conglomerate group of Pennsylvania, I believe that it will be found necessary to adopt Professor Newberry's view, and include all of these in the Lower Productive Coal Measures. Professor Lesley already intimates that such a change will be found necessary (Report Q, p. 65), and Mr. Chance seems to support this view by the title which he gives to the subjoined section. The only liberty that I have taken with the section is to affix numbers to the several elements, for convenient reference in the comparison. The upper portion of the series is much better shown in other sections, but no other gives as good a general view for my purposes. I have placed a group of coals and limestones at the head of the Ohio column, without venturing to suggest their exact equivalents in the Pennsylvania scale, but I am inclined to believe that the Shawnee limestone of the Hocking valley will prove to be the extension of the Freeport limestone of the latter State.

**MINES, MINING, MANUFACTURING,
BUILDING,
LABOR, AND COMMERCIAL INTERESTS OF OHIO.**

IRON AND COAL STATISTICS.

IRON ORE.

Total number of tons iron ore mined in Ohio in 1878, as reported by township assessors	291,847
Total number of tons iron ore from other States (used in Ohio in 1878), as reported by township assessors	633,181
Total number of tons iron ore from foreign countries (used in Ohio in 1878), as reported by township assessors	49,000
<hr/>	
Total number of tons of iron ore used in Ohio, as reported May, 1879..	974,028

PIG IRON MANUFACTURED IN OHIO IN 1878.

Number of tons cold blast native ore charcoal pig iron	29,468
“ hot “ “ “	50,478
“ “ “ stonecoal “	109,432
“ native or foreign “ “	79,191
“ “ “ charcoal “ .....	.....
<hr/>	

Total number tons pig iron manufactured in Ohio, as reported by township assessors May, 1879.....	268,567
Total number tons pig iron manufactured in Ohio in 1878, as reported by the American Iron and Steel Association.....	420,991
Total number tons pig iron manufactured by twenty Ohio furnaces in 1878-9, as reported by the proprietors.....	199,443
Least number tons pig iron manufactured by any one of the above twenty furnaces	660
Greatest number tons of pig iron manufactured by any one of the above twenty furnaces	50,000

The following tables from the annual report of James M. Swank, Secretary of the American Iron and Steel Association, show the production of pig iron in Ohio, by districts, and the total production in the United States, by States :

TABLE SHOWING THE PRODUCTION OF PIG IRON IN OHIO, BY DISTRICTS.

	Furnaces, Decem-ber 31.	Condition of fur-naces on Decem-ber 31.		Make of pig iron in net tons, (Tons of 2,000 pounds.)							
		In.	Out.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	
1878.	1878.	1878.	1878.	1878.	1878.	1878.	1878.	1878.	1878.	1878.	1878.
Hanging Rock coke	17	5	12	23,169	28,601	26,015	36,899	44,260	44,544	31,137	
Mahoning Valley.....	17	7	10	152,756	136,972	121,403	115,993	137,546	136,526	134,400	
Hocking Valley.....	13	7	6	.....	.....	.....	1,250	7,483	23,895	65,690	
Miscellaneous coke.....	23	9	14	128,196	139,958	184,748	199,760	165,057	153,316	156,251	
Hanging Rock charcoal.....	31	12	19	87,440	92,365	85,873	57,413	42,822	40,212	23,513	
Miscellaneous charcoal	3	.....	3	8,182	9,133	6,962	4,558	6,109	1,905	.....

PRODUCTION OF PIG IRON FROM 1872 TO 1878, BY STATES

States.	Furnaces, December 31.		Condition of furnaces on December 31.		Make of pig iron in net tons. (Tons of 2,000 pounds.)									
	1878.	In.	Out.	1878.	1872	1873.	1874.	1875.	1876	1877.	1878.			
Maine	1	1	....	780	....	780	1,661	2,046	3,002	1,960	1,190			
Vermont	1	1	....	3,100	2,000	3,100	3,450	2,400	550	210	555			
Massachusetts	6	1	5	21,136	17,000	21,136	27,991	21,255	5,040	2,904	1,426			
Connecticut	10	7	3	26,977	22,700	26,977	14,518	10,850	10,160	14,441	15,780			
New York	58	26	32	296,418	291,155	296,418	326,721	266,431	181,620	230,442	247,698			
New Jersey	19	6	13	102,341	103,858	102,341	90,150	64,069	25,349	52,909	70,958			
Pennsylvania	271	122	149	1,389,573	1,401,497	1,389,573	1,213,133	960,824	1,009,613	1,153,356	1,342,633			
Maryland	24	7	17	55,906	63,031	55,906	54,556	38,741	19,876	26,959	24,027			
Virginia	33	5	24	26,475	21,445	26,475	29,451	29,985	13,046	12,434	16,928			
North Carolina	7	....	7	1,432	1,073	1,432	1,340	800	400	325	....		
Georgia	11	2	9	7,501	4,445	7,501	9,786	16,504	10,514	13,223	16,363			
Alabama	12	5	7	22,283	12,512	22,283	32,863	25,105	24,732	41,241	41,482			
Texas	1	....	1	280	619	280	1,012	....	426	525	....		
West Virginia	11	5	6	23,056	20,796	23,056	30,134	25,277	41,165	34,905	50,667			
Kentucky	22	6	16	69,889	67,396	69,889	61,227	45,339	34,606	47,607	50,182			
Tennessee	23	8	15	43,134	42,454	43,134	48,770	28,311	24,535	25,940	24,347			
Ohio	104	40	61	406,029	390,743	406,029	445,001	415,593	403,277	400,395	40,991			
Indiana	7	....	7	32,488	39,221	32,488	13,732	22,081	14,547	15,460	....		
Illinois	12	4	8	55,796	78,627	55,796	37,946	49,762	54,165	61,358	78,455			
Michigan	21	9	15	123,506	100,222	123,506	136,662	114,805	95,177	82,216	70,853			
Wisconsin	15	5	10	74,144	65,036	74,144	50,792	62,139	51,261	22,205	49,487			
Missouri	18	5	13	85,552	101,158	85,552	75,817	59,717	68,223	73,565	47,499			
Oregon	1	....	1	....	....	....	2,500	1,000	1,750	....	1,310			
Utah	1	....	1	....	....	....	200	150	65	....	....	
Totals	692	265	427	2,868,278	2,854,554	2,868,278	2,689,413	2,266,581	2,093,236	2,314,505	2,577,361			

ritoy of Utah engaged in the production of pig iron ; in 1877 Oregon and Utah made no pig iron ; and in 1878 Texas, North Carolina, Indiana, and Utah made none. Only twenty States therefore made pig iron in 1878. No new iron-making territory has been developed during the past few years, except the Hocking Valley, in Ohio.

At the close of the year 1874 a systematic attempt was made for the first time to collect the statistics of stocks of unsold pig iron in the hands of makers or their agents. The new departure was so well received that but little difficulty has since been experienced in annually collecting these statistics. The figures for that year and for the years that have intervened are given below. They represent only unsold stocks at the close of each year in the hands of makers or their agents, and do not embrace stocks that have been bought on speculation, imported, or held by consumers. Tons of 2,000 pounds are used.

1874.	1875.	1876.	1877.	1878.
705,284	760,908	686,793	642,351	574,565

COAL STATISTICS.

Total number of tons of coal mined in Ohio in 1878, as reported to the county auditors by township assessors in May, 1879.	5,245,077
Total number of tons of coal mined at twenty-five mines in Ohio in 1878, as reported by the proprietors of the mines	990,893
Least number of tons mined in 1878 at any one of the above twenty-five mines	5,400
Greatest number of tons mined at any one of the above twenty-five mines....	138,754

TABLE EXHIBITING THE AMOUNT OF COAL AND IRON ORE MINED, AND THE AMOUNT OF SALT AND PETROLKUM PRODUCED IN OHIO, AS REPORTED BY TOWNSHIP ASSESSORS TO THE COUNTY AUDITORS IN MAY, 1879.

22

MANUFACTURING STATISTICS.

THE PRODUCTION OF ROLLED IRON AND STEEL IN 1878, IN THE UNITED STATES.

[From the Annual Report of James M. Swank, Secretary of the American Iron and Steel Association.]

The production of all kinds of rolled iron in the United States in 1878, including iron rails, was 1,555,576 net tons, which was an increase of 78,817 tons over the production of 1876. Appended is a table which shows the production of iron rails and of all other forms of rolled iron since 1864. By the term rolled iron we include (1) cut nails and spikes; (2) bar, angle, bolt, rod, skelp, and hoop iron; (3) plate and sheet iron; and (4) all sizes of iron rails. Bessemer steel rails are not classed among rolled iron products:

Years.	Iron rails. Net tons.	Other rolled iron. Net tons.	Total. Net tons.
1864	335,369	536,958	872,327
1865	366,292	500,048	866,340
1866	430,778	595,311	1,026,089
1867	459,558	579,838	1,039,396
1868	499,489	598,286	1,097,775
1869	583,936	642,410	1,226,356
1870	586,000	705,000	1,291,000
1871	737,483	710,000	1,447,483
1872	905,930	911,992	1,817,922
1873	761,062	1,076,368	1,837,430
1874	584,469	1,110,147	1,694,616
1875	501,649	1,097,867	1,599,516
1876	467,168	1,042,101	1,509,269
1877	332,540	1,144,219	1,476,759
1878	322,890	1,232,686	1,555,576

This table shows that the production of iron rails reached its maximum in 1872, and that it has annually declined since that year, the decline in 1878, as compared with 1877, being, however, only 9,650 tons. It further shows that the production of all other forms of rolled iron reached its maximum in 1878, when 88,467 more tons were produced

han in 1877, and 156,318 more tons than in 1873, the year of the panic. The production of all rolled iron, exclusive of rails, more than doubled from 1868 to 1878.

The following table shows the States which produced cut nails and spikes in 1878, with their production in kegs from 1873 to 1878:

States.	1873.	1874.	1875.	1876.	1877.	1878.
Maine			7,000			
Massachusetts	626,465	576,376	551,798	446,634	556,344	476,863
Rhode Island	73,249	68,920	58,730	9,986		
New York	84,438	118,955	81,263	71,591	76,147	46,470
New Jersey	456,537	552,867	522,198	342,391	303,752	254,453
Pennsylvania	1,195,609	1,503,019	1,318,259	1,368,163	1,591,924	1,349,714
Virginia	106,922	112,034	121,976	119,426	118,091	127,970
Georgia	10,183		9,300	15,000	21,000	
West Virginia	878,653	1,084,027	1,035,772	908,934	949,414	890,140
Kentucky		102,411	143,473	99,161	135,000	80,000
Tennessee		13,210	9,795	8,609	40,047	64,191
Ohio	460,618	545,052	592,768	573,439	591,336	610,245
Indiana	93,530	150,279	185,958	194,296	272,748	277,860
Illinois	33,500	85,000	88,561	200	127,015	218,224
Totals	4,024,704	4,912,180	4,726,881	4,157,814	4,828,918	4,396,130

The production of bar, angle, bolt, rod, skelp, and hoop iron in 1878 was 830,837 net tons, against 720,531 tons in 1877, 668,956 tons in 1876, 668,755 tons in 1875, 687,650 tons in 1874, and 705,964 tons in 1873.

The production of plate and sheet iron in 1878, not including nail plate, was 182,042 net tons, against 182,242 tons in 1877, 165,255 tons in 1876, 192,769 tons in 1875, 176,888 tons in 1874, and 169,169 tons in 1873.

PRODUCTION OF ALL KINDS OF STEEL IN 1878.

The production of crucible steel in the United States in 1878 was 42,906 net tons, against 40,430 tons in 1877. The production of blister and puddled steel, and of steel made by various minor "patented" processes, was 8,556 tons in 1878, against 11,924 tons in 1877. The production of open-hearth steel in 1878, was 36,126 tons, against 25,031 tons in 1877.

Open-hearth steel was manufactured in eleven establishments in 1878, which were located in the States of New Hampshire, Vermont, Massachusetts, Pennsylvania, Ohio, and Tennessee. The increased production in 1878 over 1877 was 11,055 tons. Several open-hearth works which were idle in 1878, and several new works which are now being erected, will greatly increase the production of 1879 over that of 1878.

steel; 1875, 16,340 tons, of which 2,308 tons were Bessemer steel; 1876, 13,086 tons, of which 3,563 tons were Bessemer steel; 1877, 7,015 tons, of which 1,269 tons were Bessemer steel.

The following table shows the production of iron and steel rails in this country since the beginning of the manufacture of Bessemer steel rails.

Years.	Open-hearth steel rails. Net tons.	Iron rails, all kinds. Net tons.	Bessemer steel rails. Net tons.	Total. Net tons.
1867	459,558	2,550	462,108
1868	499,489	7,225	506,714
1869	583,936	9,610	593,546
1870	586,000	34,000	620,000
1871	737,483	38,250	775,733
1872	905,930	94,070	1,000,000
1873	761,062	129,015	890,077
1874	524,469	144,944	729,413
1875	501,649	290,863	792,512
1876	467,168	412,461	879,629
1877	332,540	432,169	764,709
1878	9,397	322,890	550,398	882,685

Included in the above statistics of iron rails are a few tons of crucible steel rails and steel-headed rails. The production of these rails has been steadily decreasing in late years. No crucible rails have been made since 1874, and but few tons in that or in any preceding year. The production of both the classes of rails mentioned was as follows in 1873 and 1874: 1873, 26,377 net tons; 1874, 17,181 tons. The production of steel-headed rails in the last four years has been as follows: 1875, 19,436 tons; 1876, 12,791 tons; 1877, 5,844 tons; 1878, 2,288 tons.

The following table shows the production in net tons of rails of all

kinds in the United States from 1873 to 1878, classified by States, together with the percentage made in each State in 1878:

PRODUCTION OF BESSEMER STEEL IN 1878.

The quantity of pig iron, spiegeleisen, and ferro-manganese converted into steel by the Bessemer process, in the United States, in 1878, was 739,765 net tons, against 562,227 tons in 1877. Of spiegeleisen and ferro-manganese, alone, there were used 61,466 tons, against 48,229 tons in 1877, 45,950 tons in 1876, and 33,245 tons in 1875. The number of net tons of Bessemer steel ingots produced in 1878 was 732,226, against 560,587 tons in 1877. The number of net tons of Bessemer steel rails produced in 1878 was 550,398, against 432,169 tons in 1877. In addition to the rails produced, there were sold or worked up by the Bessemer works into other forms 73,370 net tons of ingots. There were ten Bessemer steel works in operation in 1878, the only remaining works, the Vulcan, at St. Louis, being idle. The works which were in operation used only twenty converters. Down to the close of 1878 this country had produced a total of 2,145,595 net tons of Bessemer steel rails.

IMPORTS AND EXPORTS OF IRON AND STEEL IN 1878.

The value of the imports into the United States from all countries of iron and steel and manufactures thereof has been as follows from 1871 to 1878. The figures given represent foreign invoice valuations. Tin-plate is not included :

Calendar years.	Values.	Calendar years.	Values.
1871	\$47,919,927	1875	\$15,264,216
1872	61,724,227	1876	10,584,126
1873	45,764,670	1877	9,195,368
1874	24,594,534	1878	8,943,043

A table showing the details of our imports of iron and steel in recent years is given elsewhere in this report, from which it will be seen that we imported in 1878 more pig iron, castings, and bar iron, and more cutlery and fire-arms, than in 1877, and less of all other forms of iron and steel. No iron rails were imported in either 1877 or 1878, but in 1876 we imported 287 net tons. Of steel rails we imported 35 net tons in 1877 and 10 tons in 1878; in 1876 none were imported. Our imports of pig iron in 1877 and 1878 consisted mainly of spiegeleisen.

The value of the exports from the United States to all countries of domestic iron and steel and manufactures thereof has been as follows from 1871 to 1878:

Calendar years.	Values.	Calendar years.	Values.
1871	\$11,836,137	1875	\$16,092,906
1872	10,030,125	1876	11,794,743
1873	12,129,939	1877	16,659,675
1874	15,389,807	1878	13,260,369

DOMESTIC EXPORTS OF IRON AND STEEL AND MANUFACTURES THEREOF FROM THE UNITED STATES TO ALL COUNTRIES DURING THE CALENDAR YEARS 1874 TO 1878.—CURRENCY VALUES.

[Prepared from statistics furnished by the United States Bureau of Statistics]

ANNUAL REPORT SECRETARY OF STATE.

Commodities.	1874.		1875.		1876.		1877.		1878.	
	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.	Quantities.	Values.
Iron, and manufacturers of—										
Pig iron, net tons	16,039	\$447,619	8,738	\$250,919	3,805	\$94,314	7,687	\$171,255	3,286	\$31,206
Bar iron "	4,717	331,341	9,546	675,465	3,383	222,284	2,959	154,711	2,511	126,747
Boiler-plate iron, net tons	122	13,219	66	6,272	95	8,417	155	15,950	189	10,695
Railroad bars or rails, net tons	1,257	73,159	1,210	67,064	3,665	153,465	7,445	281,198	9,108	269,740
Sheet, band, and hoop, "	86	12,254	79	7,481	81	5,998	314	25,990	142	11,068
Castings, not specified .....	.....	271,276	.....	369,170	.....	243,062	.....	257,328	.....	251,227
Car wheels, number	6,644	137,589	370	120,688	6,738	133,614	6,375	99,845	8,061	73,784
Stoves, and parts of .....	.....	141,953	.....	133,299	.....	119,228	.....	141,361	.....	98,837
Steam engines, locomotives, number	77	1,145,669	69	761,718	43	534,907	64	633,501	82	785,716
Steam engines, stationary, number	41	51,296	56	81,872	52	75,412	83	62,720	94	127,076
Boilers, separate from engines .....	.....	95,604	.....	130,688	.....	70,879	.....	88,707	.....	122,744
Machinery, not specified .....	.....	4,153,258	.....	2,966,848	.....	2,554,335	.....	3,553,394	.....	3,616,915
Nails and spikes, net tons	5,139	481,010	4,897	434,743	4,405	313,902	4,932	318,520	4,840	278,016
All other manufactures of iron .....	.....	3,279,701	.....	3,919,087	.....	3,299,213	.....	3,804,876	.....	4,222,989
Steel, and manufacturers of—										
Ingots, bars, sheets, and wire, net tons	343	29,557	50	13,963	65	17,051	72	16,101	81	13,444
Cutlery .....	.....	50,805	.....	30,318	.....	45,188	.....	42,046	.....	60,231
Edge tools .....	.....	875,548	.....	671,123	.....	626,597	.....	908,211	.....	827,798
Files and saws .....	.....	28,173	.....	34,279	.....	36,535	.....	40,103	.....	38,271
Fire arms .....	.....	3,613,440	.....	5,184,576	.....	3,054,723	.....	5,652,141	.....	1,625,279
Railroad bars or rails, net tons .....	.....	.....	.....	.....	.....	.....	.....	.....	249	9,839
All other manufactures of steel .....	.....	157,323	.....	229,328	.....	185,619	.....	391,677	.....	388,747
Total exports of iron and steel .....	.....	\$15,329,807	.....	\$16,092,906	.....	\$11,794,743	.....	\$16,659,676	.....	\$13,260,369

Agricultural implements—	48	146	14,863	69	\$1,656	255	\$11,889	50	\$7,787
Fanning mills, number.....	95	119	32,434	29	12,154	63	22,689	55	91,639
Horse-powers ".....	17,230	13,057	1,446,681	12,027	1,223,214	8,016	808,154	10,659	1,044,427
Mowers and reapers.....	13,109	12,203	142,127	15,260	132,230	19,654	160,595	18,360	134,828
Plows and cultivators.....	.....	.....	804,697	.....	986,665	.....	994,622	.....	1,681,915
All others not specified.....	.....	.....	156,346	.....	146,947	.....	200,711	.....	184,614
Scales and balances.....	.....	.....	1,715,312	.....	1,657,077	.....	1,625,094	.....	1,638,673
Sewing machines.....	.....	.....	12,269	.....	42,957	.....	64,442	.....	18,043
Fire engines and apparatus.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total agr. impts., fire engines, etc ..	.....	.....	\$4,324,729	.....	\$4,202,900	.....	\$3,888,196	.....	\$4,732,126

FOUNDRY PRODUCTIONS IN OHIO AS REPORTED BY TOWNSHIP ASSESSORS TO THE AUDITOR OF EACH COUNTY IN MAY 1879.

Counties.	Stoves and hol- low ware.	Car-wheels.	All other cast- ings.
	Tons made.	Tons made.	Tons made.
Belmont	325	.....	186
Carroll	33	.....	27
Clarke .....	.....	.....	600
Columbiana	1,890	.....	136
Cuyahoga	10,000	15,000	.....
Hamilton	12,000	2,400	17,200
Hocking .....	.....	30	20
Huron .....	.....	.....	126
Knox .....	.....	.....	100
Lake	250	.....	185
Lucas .....	.....	.....	150
Mahoning	4	.....	962
Marion .....	.....	.....	90
Meigs .....	.....	20	180
Miami .....	.....	.....	257
Montgomery .....	.....	5,000	3,000
Muskingum	700	.....	300
Perry	2	.....	28
Pickaway	160	.....	.....
Portage .....	.....	.....	1,162
Sandusky .....	.....	.....	175
Scioto	600	.....	250
Seneca .....	.....	.....	200
Stark	75	.....	1,151
Summit	687	.....	429
Trumbull	200	.....	6
Washington	460	.....	231
Wyandot .....	.....	.....	40
Totals	27,386	22,450	27,118

LOCOMOTIVE, STEAM ENGINES, AND BOILERS, SUGAR MILLS, PORTABLE SAW-MILLS, AND
FARM IMPLEMENTS MANUFACTURED IN OHIO, AS REPORTED BY TOWNSHIP ASSESSORS
TO THE AUDITOR OF EACH COUNTY IN MAY, 1879.

BOAT BUILDING IN OHIO AS REPORTED BY TOWNSHIP ASSESSORS TO THE AUDITOR OF
EACH COUNTY IN MAY, 1879.

TABLE SHOWING THE AMOUNT OF LIME AND WATER CEMENT PRODUCED, AND STONE-WARE MANUFACTURED IN OHIO AS REPORTED BY TOWNSHIP ASSESSORS TO THE COUNTY AUDITORS IN MAY, 1879.

Counties.	Lime.	Water cement.	Stone-ware.
	Number barrels made.	Number barrels. made.	Number gallons made.
Adams			3,000
Clarke	102,000		
Columbiana		21,000	15,000
Cuyahoga	73,574		
Defiance		5,000	
Delaware	540		
Erie	80,000		
Fayette	800		
Greene	108,250		
Guernsey			60,000
Hamilton	6,210		
Hancock	5,000		
Highland		6,166	10,000
Jefferson	500		
Logan	1,200		
Mahoning	4,126		124,400
Marion	20,000		
Mercer	750		
Morgan	306		72,000
Muskingum	400		905,900
Noble			44,000
Perry			356,500
Pickaway	100		2,400
Portage			200,000
Preble	8,000		
Sandusky	78,000		
Seneca	16,620		
Shelby	2,000		
Summit	6,000		3,540,000
Tuscarawas	4,520		20,000
Wayne	3,500		1,000
Wood	9,300		
Wyandot	1,100		
Totals	532,826	32,166	5,354,200

NUMBER AND VALUE OF COUNTY BUILDINGS IN OHIO—Continued.

Counties.	County buildings erected within the year ending June 30, 1879.		All county buildings now existing.	
	Number.	Value.	Number.	Value.
Logan .....	.	.....	3	\$150,000
Lorain .....	.	.....	2	20,000
Lucas	1	\$4,000	4	117,500
Madison .....	.	.....	2	45,000
Mahoning .....	.	.....	3	135,000
Marion	1	23,250	3	28,100
Medina .....	.	.....	3	50,000
Meigs .....	.	.....	2	25,000
Mercer .....	.	.....	5	101,000
Miami	2	19,000	6	114,000
Monroe	1	7,762	3	52,000
Montgomery .....	.	.....	5	800,000
Morgan .....	.	.....	3	40,000
Morrow .....	.	.....	3	50,000
Maskingum .....	.	.....	5	350,000
Noble .....	.	.....	3	40,000
Ottawa .....	.	.....	4	25,000
Paulding .....	.	.....	4	30,000
Perry	1	1,500	3	27,000
Pickaway .....	.	.....	2	150,000
Pike .....	.	.....	3	50,000
Portage .....	.	.....	3	70,000
Preble .....	*	.....	.	.....
Putnam .....	.	.....	4	42,500
Richland .....	.	.....	2	193,325
Ross .....	.	.....	3	300,000
Sandusky .....	.	.....	3	60,000
Scioto .....	.	.....	5	100,000
Seneca .....	*	.....	.	.....
Shelby .....	.	.....	3	116,000
Stark .....	.	.....	4	210,000
Summit .....	.	.....	3	160,000
Trumbull .....	.	.....	.	100,000
Tuscarawas .....	.	.....	3	25,000
Union .....	.	.....	3	70,000
Van Wert .....	.	.....	4	120,000
Vinton .....	.	.....	5	36,000
Warren .....	.	.....	4	150,000
Washington .....	.	.....	8	60,000
Wayne .....	.	.....	.	180,000
Williams .....	.	.....	5	45,000
Wood .....	.	.....	3	40,000
Wyandot .....	*	.....	.	.....
Totals	8	\$110,972	314	\$11,333,925

* Not reported.

[illegible]

BUILDINGS AND OTHER PROPERTY DESTROYED BY FIRE, ETC.

TABLE SHOWING THE VALUE OF PROPERTY DESTROYED BY FIRE, FLOOD, OR OTHER CAUSES IN EACH COUNTY IN OHIO DURING THE YEAR ENDING JUNE 30, 1879, AS REPORTED BY COUNTY AUDITORS.

COUNTY	NUMBER OF BUILDINGS DESTROYED	VALUE OF PROPERTY DESTROYED	NUMBER OF BUILDINGS DESTROYED	VALUE OF PROPERTY DESTROYED
Delaware	6	4,600	5	2,600
Erie	13	3,940	1	100
Fairfield	1	300		
Fayette				
Franklin	15	5,535		
Fulton	5	875		
Gallia	8	3,940		
Geauga	9	6,110		
Greene	5	2,050		
Guernsey	57	105,270		
Hamilton	10	5,470		
Hancock	9	3,040		
Hardin	8	4,850		
Harrison	7	3,950		2,500
Henry	5	5,280		
Highland	3	1,500		
Hocking	5	4,000		
Holmes	3	3,000	20	6,180
Huron	2	575	3	1,650
Jackson	5	950		
Jefferson	6	1,942	7	1,544
Knox	11	5,012		
Lake	2	700		
Lawrence	8	5,050		1,000
Licking	8	5,191		
Logan	5	2,000		
Lorain	9	60,000	13	10,554
Lucas	3	1,900		
Madison				

BUILDINGS AND OTHER PROPERTY DESTROYED, ETC—Continued.

*Noble county, one building destroyed by flood, value \$246.

LABOR STATISTICS.

REPORTED BY TOWNSHIP ASSESSORS TO THE AUDITOR OF EACH COUNTY IN OHIO IN MAY, 1879.

Adams
 Allen
 Ashland . .
 Ashtabula
 Athens . . .
 Auglaize . .
 Belmont . .
 Brown
 Butler
 Carroll . . .
 Champaign
 Clarke
 Clermont . .
 Clinton . . .
 Columbian
 Coshocton
 Crawford . .
 Cuyahoga
 Darke
 Defiance . .
 Delaware . .
 Erie
 Fairfield . .
 Fayette . . .

LABOR STATISTICS OF CINCINNATI--*Massell.*

A CLASSIFIED AND COMPARATIVE STATEMENT OF THE NUMBER OF HANDS EMPLOYED IN THE MANUFACTURING INDUSTRY IN CINCINNATI,
FOR THE YEARS 1850, 1860, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, AND 1878.



α



TRADE AND COMMERCE
OF
CINCINNATI, 1878-79.

dawn of which, in many a golden hue, may be traced in the business of the past year. Cincinnati looks out upon a future of great promise. Her financial foundations are strong. Her industrial forces are active and enterprising. Her commercial energies are soon to find the amplest opportunity for their exercise in a new field, of great breadth and richness. Her facilities for education in the professions and the arts are inviting pupils from all parts of the land. Her musical facilities stand without a rival in this country. Her public spirited citizens are embellishing the city with works of benevolence and beauty, while her centrality, her accessibility, her healthfulness, her good schools, her churches, her libraries, her society, and her many objects of interest and enjoyment, invite alike the tourist and the seeker for a permanent residence, and furnish an invaluable supplement to her business attractions.

The aggregate value of the products of our manufacturing industry, the number of hands employed, the value of real estate occupied, the cash capital invested, and the number of establishments engaged at Cincinnati, for each year in which statistics have been compiled touching these particulars, will be found in the following table:

255

7
2

255

* Not reported.

The aggregate, annual, approximate value of the imports and exports, respectively, at Cincinnati, from 1851-5 to 1878-9, inclusive, appears in the following table :

Years.	Imports.	Exports.
1854-55	\$67,501,311	\$38,777,374
1855-56	75,215,901	50,209,146
1856-57	77,950,146	55,612,172
1857-58	83,644,747	52,906,506
1858-59	94,213,247	61,007,707
1859-60	103,347,216	77,037,100
1860-61	90,195,136	67,023,126
1861-62	103,292,793	76,449,862
1862-63	144,189,213	102,397,171
1863-64	389,790,537	219,079,125
1864-65	307,552,397	193,790,311
1865-66	362,032,766	201,450,055
1866-67	335,961,233	192,929,317
1867-68	280,063,948	144,262,133
1868-69	283,927,903	163,084,358
1869-70	312,978,665	193,517,690
1870-71	283,796,219	179,843,427
1871-72	317,646,608	200,607,040
1872-73	326,023,054	213,320,760
1873-74	331,777,055	221,536,852
1874-75	311,072,639	201,404,023
1875-76	294,214,245	190,126,929
1876-77	270,892,540	191,426,531
1877-78	223,237,157	126,209,646
1878-79	205,153,301	192,335,337

THE MANUFACTURES OF THE CITY OF CINCINNATI--Continued.

Class of manufactures.	Year ending January 1, 1879.						Year ending January 1, 1878.					
	No. of establishments.	Cash capital invested.	Value of real estate occupied.	No. of hands employed.	Value of production.	No. of establishments.	Cash capital invested.	Value of real estate occupied.	No. of hands employed.	Value of production.	No. of establishments.	Cash capital invested.
Bread, crackers, etc	272	\$120,000	\$520,000	1,605	\$2,431,300	269	\$131,000	\$491,000	1,500	\$2,072,600	269	\$131,000
Brick	35	262,500	220,000	420	334,000	34	30,000	250,000	550	450,000	34	30,000
Bricklaying	33	120,000	.....	230	339,547	31	175,000	.....	280	549,545	31	175,000
Britannia ware	1	20,000	14,000	40	60,000	1	20,000	10,000	35	50,000	1	20,000
Brooms	10	12,000	16,000	5	33,900	9	12,300	16,000	39	23,700	9	12,300
Brushes and wire goods	17	90,900	102,800	209	214,200	17	96,550	113,700	245	234,200	17	96,550
Building materials (exclusive of brick and stone)	26	798,200	985,000	920	1,296,800	25	943,000	1,124,000	1,009	1,617,600	25	943,000
Bungs	4	24,500	40,500	21	47,304	3	25,635	49,600	17	49,231	3	25,635
Burial cases and hearses	7	335,000	228,000	347	616,000	7	343,000	260,000	349	623,800	7	343,000
Candles, soaps, and oils	34	1,900,000	1,324,700	1,100	8,104,427	33	1,885,000	1,514,500	1,031	7,495,030	33	1,885,000
Candy and other confections	15	163,700	164,000	245	110,000	19	258,500	216,000	205	846,713	19	258,500
Canned goods	4	115,000	51,000	720	464,000	4	104,000	51,000	640	403,000	4	104,000
.....	141	157,000	270,000	693	902,556	176	200,000	240,000	1,052	1,522,014	176	200,000
Carpets	29	27,400	51,000	110	75,000	23	21,800	49,300	84	78,300	23	21,800
Carriages and buggies	61	934,000	645,000	1,719	2,645,445	54	651,700	523,500	1,207	1,464,044	54	651,700
Carriage and wagon materials	7	413,000	144,000	331	424,214	6	257,000	162,000	234	313,450	6	257,000
Cement, lime, and plaster	6	25,500	20,000	63	34,300	6	29,700	23,900	68	41,700	6	29,700
Cement felting (c)	1	5,000	3,000	6	10,000	1	5,000	3,000	6	10,000	1	5,000
Chair backs and frames	5	31,000	26,000	90	94,003	7	37,250	37,000	99	111,135	7	37,250
Charcoal, fuel (a)	11	12,000	.....	52	31,000	9	12,700	.....	47	26,800	9	12,700
..... ground	3	9,500	11,000	13	35,000	3	9,700	12,400	13	37,200	3	9,700
Chewing gum (c)	1	500	3,000	6	20,000	1	500	3,000	6	20,000	1	500

Children's carriages, hobby horses, etc	3	36,000	27,000	79,500	3	36,100	31,000	69	84,000
Clocks, mantillas, dress trimmings, etc	16	230,000	200,000	723,000	16	190,000	225,000	1,235	647,830
Clothing and genteel furnishing goods..	335	3,771,300	3,188,000	9,462,708	411	4,145,140	3,819,000	13,831	10,131,900
Coffins.....	9	38,948	27,000	69,717	10	20,000	21,200	39	53,700
Coke.....	5	25,000	100,000	160,000	5	24,800	116,000	33	103,900
Coloring, dyeing, and laundry work..	59	95,000	101,000	181,700	53	96,200	98,000	214	173,800
.....	84	246,000	207,000	843,000	81	243,300	218,500	632	624,000
.....	7	21,000	36,300	79,610	7	16,900	43,000	32	91,870
.....	13	168,700	60,000	312,700	13	168,700	60,000	200	312,700
Cotton goods.....	4	241,000	341,000	533,000	4	233,000	333,000	312	516,000
Curled hair and barettes.....	7	159,55	66,500	273,373	7	160,717	70,500	201	277,832
.....	8	37,500	42,000	91,000	9	43,600	47,000	33	94,400
.....	50	34,000	60,000	139,000	30	30,000	40,300	75	107,300
.....	4	15,000	20,000	41,000	4	13,400	23,000	35	49,400
and glycerine.....	20	839,000	425,000	1,431,000	21	917,000	500,000	263	2,181,500
queensware.....	9	155,000	162,000	238,700	9	169,000	177,000	296	257,500
and iron show cards.....	2	40,000	39,000	153,000	3	40,000	39,000	50	155,000
Engraving, glass.....	2	3,700	4,900	9,700	2	3,700	4,900	5	11,000
" metals.....	10	8,500	13,700	23,470	10	8,300	15,000	27	19,340
" wood.....	14	10,400	17,000	49,300	12	9,900	14,400	47	40,400
Excelsior.....	2	12,000	19,000	21,300	2	12,000	19,000	24	21,300
Fertilizers.....	4	193,000	64,000	304,000	4	182,000	64,000	121	207,000
Files.....	4	9,200	20,000	31,000	4	12,500	20,300	54	45,000
Fire alarm telegraph, etc.....	3	7,500	6,700	25,300	3	7,500	6,200	13	15,400
Fire-arms.....	6	6,000	3,000	8,000	6	4,400	3,500	11	9,000
Fire-brick, to.....	5	40,000	40,000	61,700	5	40,500	40,000	40	61,700
(s).....	1	30,000	15,000	45,000	1	30,000	15,000	60	60,000
Fire-wood and kindling.....	3	6,200	6,000	22,000	4	3,300	4,500	24	16,000
Flag and banners.....	2	12,000	10,100	31,000	2	14,000	10,000	27	45,000
.....	10	217,000	172,000	420,000	8	200,000	160,000	55	357,933
.....	23	115,000	400,000	220,000	22	130,000	435,000	63	217,500
.....	4	25,000	32,000	27,900	3	2,100	35,700	19	26,500
.....	9	379,000	177,000	601,000	10	405,000	242,400	499	612,000
.....	131	3,321,000	2,980,000	6,535,734	139	3,054,700	3,392,600	3,552	6,848,194
.....	7	65,000	55,000	163,800	7	66,000	60,000	89	158,400
sheet iron works.....	12	157,000	142,000	517,300	13	144,600	164,000	191	549,300
Gas.....	1	4,950,000	2,000,000	1,142,000	1	4,250,000	1,500,000	400	1,100,000
Gas (water).....	4	65,000	45,500	137,000	3	60,000	63,000	37	111,000
Glassware.....	1	150,000	100,000	200,000	1	200,000	110,000	220	200,000
Glass, stained and ground.....	5	10,000	10,000	29,000	6	11,200	13,300	24	24,280
Glue (s).....	4	175,000	70,000	221,500	5	151,000	70,700	66	231,000
Gold foil.....	2	17,000	10,000	60,000	3	19,900	13,200	47	63,400

Class of manufactures.	Year ending January 1, 1879.						Year ending January 1, 1878.					
	No. of establishments.	Cash capital invested.	Value of real estate occupied.	Number of hands employed.	Value of production.	No. of establishments.	Cash capital invested.	Value of real estate occupied.	Number of hands employed.	Value of production.	No. of establishments.	Cash capital invested.
Rubber moldings and stamps	7	\$3,500	\$5,800	11	\$7,500	6	\$5,320	\$10,000	11	\$7,960	6	\$5,320
Saddle-trees	2	23,500	23,500	40	45,300	2	23,500	23,500	40	45,300	2	23,500
Safe	6	95,000	357,000	930	1,973,000	5	1,000,000	428,000	970	1,915,000	5	1,000,000
Saw	5	103,900	95,000	60	81,065	5	92,014	97,517	45	74,485	5	92,014
Scales and trucks	4	35,500	33,000	25	18,800	4	35,600	37,000	31	61,000	4	35,600
Seal pressers and canceling stamps ..	5	7,000	19,000	22	21,790	5	8,400	19,000	22	22,000	5	8,400
Sealing wax	1	3,000	.....	10	10,000	3	7,000	14,000	27	23,000	3	7,000
Sewing machine outfits (see machinery for 1878) .....	.....	.....	.....	.....	.....	5	120,000	61,400	24	158,400	5	120,000
Shipping tags	2	4,100	8,500	6	8,500	1	3,500	3,000	4	7,500	1	3,500
Shoes (see boots and shoes) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Show cases	4	27,100	35,600	45	77,000	4	33,000	41,600	47	75,600	4	33,000
Silver plated ware	8	39,300	71,000	64	12,042	7	42,700	61,000	63	79,707	7	42,700
Stair building	8	117,000	79,000	77	424,300	5	153,000	116,000	93	325,920	5	153,000
Starb	11	34,100	37,000	95	103,400	10	44,200	40,000	98	125,100	10	44,200
Steamboats and barges	2	6,000	350,000	155	745,000	2	60,100	362,000	143	835,000	2	60,100
Steam heating apparatus	3	120,000	170,000	440	358,000	3	120,000	170,000	120	311,000	3	120,000
Stencils, dies and checks	12	51,100	41,500	41	87,000	12	55,000	47,000	41	89,420	12	55,000
Stone and marble work	9	21,000	45,000	49	57,445	9	17,500	45,000	45	61,000	9	17,500
Stoves and hollow ware	42	730,000	600,000	700	1,137,700	41	732,210	601,000	731	1,407,600	41	732,210
Stove polish (a)	10	900,000	661,000	1,140	1,381,700	9	932,000	643,000	1,111	1,354,500	9	932,000
Tin ware	2	2,500	3,000	4	4,000	2	2,700	3,000	4	4,100	2	2,700
	71	193,000	261,500	437	729,500	64	164,500	251,500	490	674,710	64	164,500

Tobacco, cigars (g)	503	838,000	650,000	2,830	2,356,365	493	820,000	900,000	2,500	2,159,722
“ fine-cut, plug, and snuff (i) }	41	876,330	450,000	1,050	2,015,162	}	900,000	547,000	900	2,056,002
“ smoking (i)	14	109,000	234,700	113	169,300		109,000	256,500	120	184,800
Trunks and valises	6	250,000	200,000	400	520,000	5	250,000	220,000	374	490,000
Type and printing materials	9	10,000	9,000	31	25,700	5	4,700	8,500	14	11,400
Umbrellas and parasols	5	160,000	75,000	45	500,000	6	160,000	70,000	35	200,000
Varnishes and Japans (a)	2	125,000	85,000	66	191,000	2	105,000	65,000	66	196,000
Veneers	2	2,500	2,300	7	8,700	2	2,500	2,300	7	8,750
Vermicelli, macaroni, and chocolate ..	15	120,000	134,300	58	553,713	15	135,100	150,000	55	565,000
Vinegar and cider	65	297,300	260,000	512	671,000	45	162,000	258,000	358	458,500
Wagons, carts, etc	9	533,500	308,000	20	1,153,700	9	834,000	326,500	207	1,236,000
White lead, colors, paints, and putty ..	32	46,300	53,500	140	117,700	21	39,900	55,000	113	103,500
Wigs and hair goods	8	7,000	8,000	23	13,800	11	5,700	8,000	21	11,000
Willow ware	4	9,000	16,000	22	16,700	4	9,000	16,000	22	16,700
Window shades (c)	3	145,000	91,000	154	241,000	2	163,000	125,000	157	276,000
Woolen and worsted goods	19	195,000	173,000	378	592,100	16	200,000	210,000	317	555,900
Wooden ware	18	25,000	40,000	60	84,200	18	25,000	43,000	57	77,000
Wood turning	1	75,000	30,000	40	110,000	1	75,000	30,000	40	120,000
Wingling machines										
Totals	5,272	57,509,215	45,245,687	67,145	138,736,105	5,183	57,867,192	47,464,792	64,709	135,123,768

a, Estimated.
b, 34,344,429 pounds, 1873. Han's, etc., included with provisions.
c, Previous year's figures
d, 9,076,447 gallons, 1878.
e, 17,776,254 gallons, 1878. Hands, product, etc., of bottling establishments included.
f, 8,814,319 gallons, 1878.
g, 93,953,300 cigars, 1878. 2,511,000 cigarettes, 1878.
h, 81,560 barrels, 1878.
i, Number of establishments manufacturing plug tobacco, 4; fine cut, 13; smoking, 18; snuff, 6. Quantity produced: plug, 137,566 pounds; fine-cut, 2,115,412 pounds; smoking, 1,824,841 pounds; snuff, 15,613 pounds, 1878.

STATEMENT OF FOREIGN MERCHANDISE IMPORTED AND APPRAISED AT OTHER PORTS, AND TRANSPORTED TO THE PORT OF CINCINNATI,
DURING THE PAST THREE YEARS, EACH YEAR ENDING JUNE 30.—*Matteoli.*

Articles.	1878-79.			1877-78.			1876-77.		
	Quantity.	Invoice value.	Duty.	Quantity.	Invoice value.	Duty.	Quantity.	Invoice value.	Duty.
<i>Free of Duty.</i>									
Miscellaneous					\$124				
<i>Subject to Duty.</i>									
Rice, pounds	2,500	\$1,444	\$375 00	11,520	6,064	\$1,728 12	144,532	\$103,405	\$21,229 92
Barley, bushels							187	1,766	781 00
Champagne, dozen							123 7-10	476	427 59
Cigars, pounds									
Cotton, manufactures of									
China, earthenware, etc.		317	126 80						
Fancy goods, including toys ..		1,510	619 00			351 31		908	321 18
Fire-arms					1,766	618 10			
Fruit juice		1,842	460 50						
Glassware		355	133 26						
Polished granite		4,003	800 60						
Steel in sheets, bars, etc.	68,092	6,692	2,167 54						
Iron and steel, manufactures of ..		159	75 80			507 60		309	123 05
Jewelry and precious stones		3,245	618 50			571 15		9,488	1,699 95
Musical instruments									
Paintings					1,163	116 30			
Paper					1,198	699 30			
Plate glass, silvered, square feet ..									
Silk manufactures of									
Spirits, proof, gallons	7,582	9,252	15,718 82	4,603	4,952	9,093 40	6,933	8,826	13,948 50

[illegible]

TABLE SHOWING THE COLLECTIONS OF INTERNAL REVENUE, ALL SOURCES, IN CINCINNATI FOR TWO YEARS.—Maxwell.

	1878-79.	1877-78.
<i>Distilled Spirits.</i>		
Tax on spirits, at 50 cents per gallon .....	.....	.....
“ “ 70 “ “ .....	.....	.....
“ “ 90 “ “	\$8,794,161 90	\$7,507,742 80
Rectified stamps	23,600 80	24,006 40
Wholesale liquor stamps	2,233 80	1,878 00
Distillery warehouse stamps	20,793 20	17,384 90
Export stamps	427 50	205 00
Other kinds of taxes	1 60	.....
Totals	\$8,841,218 80	\$7,551,217 10
<i>Beer.</i>		
Tax on beer (less 7½ per cent. discount allowed for sour beer) at \$1.00 per barrel	\$516,805 87	\$509,220 88
<i>Tobacco, Cigars, and Snuff.</i>		
Tax on smoking and chewing tobacco, cigars, and snuff.	\$1,349,845 14	\$1,621,460 92
<i>Banks.</i>		
Tax on bank deposits (1-24 of 1 per cent. per month)...	\$27,906 16	\$37,044 67
“ “ capital (1-24 of 1 per cent. per month)....	6,660 61	7,046 76
Totals	\$34,566 77	\$44,091 43
<i>Special Taxes (Licenses), etc.</i>		
Rectifiers	\$8,566 73	\$12,483 33
Wholesale liquor dealers	18,345 83	17,916 67
Retail liquor dealers	80,543 78	77,543 34
Brewers	2,375 00	2,140 00
Stills or worms for distilling manufactured	20 00	.....
Manufacturers of stills	24 99	.....
Manufacturers of cigars and tobacco, dealers in manufactured and leaf tobacco, and peddlers of tobacco..	28,777 42	27,794 58
Totals	\$138,653 75	\$137,777 92
<i>Other Sources.</i>		
Tax collected from other sources	\$10,032 06	\$3,891 65
Tax all sources	\$10,891,122 39	\$9,867,668 96

TRADE AND COMMERCE
OF
TOLEDO.

THE MANUFACTURES
OF THE
CITY OF CLEVELAND.

traps	Steel wire.	Washboards.
g machines.	Stoves.	Washers.
la.	Tanners.	Washing machines.
	Telegraph instruments.	Water drawers.
gs.	Tobacco.	Wheelbarrows.
g beds.	Tool manufacturers, 9.	White lead.
machines.	Trunks.	Wire works.
engines.	Truss.	Wooden ware.
Bessemer works.	Varnish.	Woolen mills.
Otis works.	Vinegar.	Vessels, steam and sail.
screw works.	Wagona.	

ERRATUM.

The headings of "Marriages in each month," pp. 308, 309, should commence with April instead of January, and end with March instead of December. Hence, for January, read April; for February, read March, etc., etc.

On page 423, for Class 4, read Class 3 (second line from top of page).

	PAGE
Carrington, M. D., member Board of State Charities	60
Castings	646
Cement, water	649
Chattel property, valuation of	460-462
Cheese produced in 1878	537, 538
Cheese, comparative table of	538
Cincinnati, trade, commerce, and manufactures of (<i>Marxwell</i>)	665-695
Cincinnati labor statistics	663
Cities and villages incorporated	139
Cities of Ohio, valuation and taxation in	475-477
Cities of Ohio, debts of	478-480
Civil judgments	283, 284
Classified statement of incorporations	112, 113
Clerks of Courts	98, 99
Clerk of Supreme Court	55
Cleveland Asylum for the Insane, roster of	67
" " " statistics of	347, 359
Cleveland, manufactures of	703-705
Climatology, etc	559-571
Clover, crop of 1878	525, 526
Clover, comparative table of	527
Coal, statistics of	633
Columbus Asylum for the Insane, roster of	66
" " " statistics of	349, 350
Common School Fund, payment of to counties	262, 263
Common carrier companies incorporated	130, 131
Commission to revise and codify the statutes	55, 79
Commissioner of Common Schools	55, 58
" Railroads and Telegraphs	55, 58
" Labor Statistics	55, 61
Commissioners, County	108, 109
Commerce, Foreign	644
Congress, abstract of votes cast for Representatives to	172-183
Constitutional diseases	403-411
Conveyance statistics	505-516
Co-operative associations incorporated	126-129
Cook, Theodore, Jury Commissioner	80
Cope, Alexis, Chief Clerk Secretary of State's office	56
Corn, crop of 1878	520, 521
Corn, comparative table of	522
Corn planters	647
Coroners, county	106, 107
Coroners' inquest	440-443
Corporations	3, 111-139
Counties, debts of	478-480
County buildings, number and value of	650, 651
County buildings, new	650-657

	PAGE
Marriages in each county in Ohio	306-309
Mellvaine, G. W., Judge of the Supreme Court	55, 79
Meadow products	525, 526
" comparative tables	527
Meily, Luther M., Adjutant-General	55, 56, 59
Meteorology, etc	559-571
Meteorological tables	560-571
Miller, C. A., Superintendent Longview Asylum for Insane	70
Mines, mining, and manufactures in Ohio	625-663
Mines, Inspector	61
Mining statistics	627-629, 633
Mining companies incorporated	118, 119
Miscellaneous manufactures—tables of	645-649
" corporations	138
Moneys and credits	468-470
Morse, D. A., Superintendent Dayton Asylum for Insane	68
Mortgages	512-514
Mowing machines	647
Mules	539, 540
Municipal corporations	4

N

Nails, spikes, etc., made in 1878	645
Nash, George K. (<i>Attorney-General elect</i>)	55
Nativity of deceased persons	372-377
Naturalization statistics	319-321
Nevins, Richard, Jr.	56
Newburgh, A. B., Secretary Board of Public Works	58
Newburgh, F. W., Assistant Secretary Board of Public Works	58
New structures in Ohio. (<i>See Building Statistics.</i>)	
Non-taxable bonds	495
Nosological tables and nosology of Ohio	393-439

O

Oats—crop of 1878	520-521
" comparative table	523
Occupation of deceased person	378-386
Official roster of Ohio	53-109
Oglevee, John F. (<i>Auditor of State elect</i>)	55
Ohio State University—roster of	62
" " statistics of.....	339
Ohio, and Ohio State Reports on hand	4
Ohio Institution for the Education of the Deaf and Dumb—roster of	63
" " " " statistics of	340
Ohio Institution for the Education of the Blind—roster of	64
" " " " statistics of.....	341

Ohio Institution for the Education of Imbecile Youth—roster of.....	6
“ “ “ “ statistics of	20
Ohio Soldiers' and Sailors' Orphans' Home—roster of.....	71
“ “ “ “ statistics of	20
Ohio Reform School—roster of.....	75
“ “ statistics of	20
Ohio Penitentiary—roster of.....	75
“ “ statistics of	254, 255
Ohio State Fish Commission—roster of	60
Ohio State Board of Agriculture—roster of	61
Ohio University (<i>Athens</i>)	72
Ohio Pioneer History.....	7
Ohio Territorial Laws.....	20-41
Ohio its admission into the Union.....	43-52
Okey, John W., Judge of the Supreme Court	55, 79
Okey, George B., Codifying Commission.....	55, 79
Okey, T. W., Clerk “	79
Orchards, acres in.....	550, 551
Orton, Edward, President Ohio State University	62
“ “ Paper on Geology of Eastern Ohio	589-623
Ostrander, Charles H., Stationery Clerk Secretary of State's office.	56
Owens, David	55, 61

P

Paul, George	55, 59
Paper for the State.....	4
Paper, manufacture of	690
Pasture lands (<i>See Lands</i>).....	...
Paige, Ralph K.....	56
Paupers, pauperism and cost in each county in Ohio	334, 335
Peaches—crop of 1878	550, 551
Pears—crop of 1878	550, 551
Pennington, Joseph P., Actuary Superintendent of Insurance	58
Pensions—disbursed in Ohio.....	455
Perkins, Joseph, Member Board State Charities	60
Petroleum	633
Pig-iron (<i>See Iron</i>).....	...
Pillars, Isaiah, Attorney-General.....	55, 57, 59
Pillar, James, Clerk Attorney-General's office.....	57
Pioneer History (<i>Smucker</i>).....	7-30
Plank-roads, number, length, and cost of.....	503, 504
“ “ incorporated.....	122, 123
Plows	647
Potatoes—crop of 1878.....	528, 529
“ “ sweet, crop of 1878.....	528, 529
Potatoes—comparative table of.....	530
Potter, Emery D., Superintendent Ohio State Fish Hatchery.....	60

	PAGE
Re-packing in Ohio	691-695
Reen, James D., Inspector of Mines.....	55
Reeves, Noyes B., United States Marshal.....	81
Referential Elections—votes cast at in Ohio.....	170, 171
Printing and publishing companies incorporated.....	130, 131
State judges in Ohio.....	98, 99
Prosecuting attorneys.....	100, 101
Prosecutions	297-302
Public debts, property and taxation	451-481
Public funded debt.....	452

Q

Quotations, hogs and lard, annual, comparative table of.....	691, 692
Quadrennial enumeration.....	314, 315

R

Railroads, turnpikes, and plank-roads.....	497, 504
“ mortgages	514
“ property, valuation of	498-502
“ companies incorporated.....	124, 125
“ street, incorporated	120, 121
“ consolidations, extensions, changes of name, etc	120, 121, 138
“ statistics of	497-502
Rain fall	561, 564, 570
Reaping machines.....	647
Recognizances, forfeited	280-282
Recorders, county.....	104, 105
Reform Schools, boys and girls sent to	329-333
Representatives, Sixty-fourth General Assembly.....	90, 91
“ “ “ vote for members of	192-195
Richards, Channing, United States District Attorney	80
Ricks, A. J., Clerk United States Courts	81
Robinson, Godfrey M., Statistician, Auditor of State's office.....	57
Robinson, James S	55
Roberts, Thomas R.....	56
Roster, Ohio official	53, 109
Ryan, James B., clerk Commissioner of Common Schools.....	58
Rye, crop of 1878.....	518, 519
Rye, comparative table of	524

S

Sands, L. K., carpenter.....	59
Salt, bushels produced in 1878	633
Saw mills, portable, manufactured and in use in Ohio.....	647
Schilder, Martin, member Board of Public Works	55, 58
Schmidt, Louis	56
Scholars, enumeration of	264

